THE HOME NURSE AND NURSERY

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THE

HOME NURSE

AND

NURSERY.

A PRACTICAL TREATISE ON THE MANAGEMENT OF THE SICK-ROOM; ITS VENTILATION, TEMPERATURE AND CLEANLINESS; THE CARE OF THE PATIENT; OBSERVATIONS AND ADMINISTERING MEDICINES;
WITH
CHAPTERS ON ACCIDENTS AND EMERGENCIES: DOMESTIC MEDICINES; COMPLETE COOKERY FOR THE SICK ROOM; AND SPECIAL DEPARTMENT ON THE MANAGEMENT AND CARE OF INFANTS.

EDITED BY

MRS. HARRIET E. HAYES.

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PREFACE.

THOSE who are conversant with the management of the sick, know the good effects of efficient nursing during the time of disease and convalescence. Not only through its influence is suffering rendered more bearable, but the duration of disease is shortened, and its type becomes less virulent.

There are, however, the two great barriers of popular ignorance and prejudice which oppose the physician in his treatment of disease. Against these he has daily to contend, and anything which helps to their removal, while at the same time assisting him in his work, must confer a benefit upon humanity at large.

The following pages have been written with the object of disseminating the principles of sick-nursing among the masses, and in order to accomplish this, the language employed throughout is simple and without technicality.

The subjects treated of are those which constitute the fundamental elements of sick-nursing, and plain, practical rules are abundantly interspersed throughout the book. In addition thereto,

a chapter has been devoted to the management of the health in old age, which, while a novelty in a treatise of this nature, will, the author believes, prove useful to those for whom it is intended.

We have also made the management of the nursery a special feature of the book. The fact of the enormous mortality of children under the age of three years, has for a long time attracted the attention of physicians, rendering it of the utmost importance that some work embracing the best opinions on the subject of the care of young children, be prepared.

The author's purpose in this volume will be but little understood if it lead people to take the treatment of disease into their own hands; on the contrary, it has been her aim throughout to assist the physician in his work; to supplement him in all that he does, and to pave and clear the way, by careful attention to hygienic rules, for any mode of treatment he may find it necessary to adopt.

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CHAPTER I.

INTRODUCTORY.

HEALTH is acknowledged by every one to be a great blessing—to be indeed the chief of all blessings,—and yet when we come to inquire into the means that are taken to preserve it, we may well be struck with astonishment. Nothing appears to be regarded more lightly, or treated with greater carelessness, than those laws which have for their object the maintenance of health where it already exists, or the acquirement of it where it is wanting. This may be accounted for by the fact that health is an advantage of an abstract kind, the value of which we do not appreciate until we are deprived of it; but in addition to this there is a very prevalent belief that because the breaking of nature's laws is not succeeded *instantly* by results which cannot be mistaken, no harm will result from the errors we have committed.

Could we but see the folly of believing in such a fallacy, how much suffering might poor humanity be saved! We may not be conscious of any evil effect from a single breach of those laws of health, but by constant repetition we cannot fail of ulti-

mately bringing upon ourselves suffering and misery proportioned to our disregard. We regard health as a fund from which we may draw at pleasure without leading to exhaustion; the memory of the past, though present to our mind in all its vividness, we disregard; we have the experience of others to warn us, but we are heedless, and imagine our individual case is to prove an exception to the general rule. Surely we ought to estimate more highly this blessing, without the possession of which, name, rank and position are deprived of their value, and riches and honor are as nothing.

In health all the organs of the body act harmoniously and unconsciously; we take our food, and the process of digestion goes on without attracting attention. Whenever there is any deviation from this condition the approach of disease may be dreaded, and should it not quickly pass away, and each organ act unconsciously as before, we have the presence of actual disease. It is when this state has been brought about that the duties of the sick-nurse begin.

The subject of sick-nursing till recently was little thought of, and even yet its fundamental rules are but little understood. Any sort of qualification was considered good enough for those who chose to undertake the work; and yet if we reflect for a moment upon the nature of that work we shall

not think thus lightly of it. All the best qualities and all the finer feelings that go to form the character of woman are brought into exercise in discharging faithfully the arduous duties of the sick-nurse, and where these are wanting the work can in no true sense be done. The powers of endurance may be severely tested, the temper may be sorely tried, but she is but little fitted for the task who becomes impatient or gives way to anger. The sick are selfish, and to the strong their little whims may appear ridiculous; but she who would fulfill the duty of sick-nurse aright must treat them at all times with thoughtful consideration. Happy would it be, indeed, if this subject formed part of every woman's education! How much easier would sickness become, how much shorter its duration, how much more bearable its pangs! The work of the physician would then be greatly lightened, his mind relieved of much anxiety, and the patient's recovery greatly hastened.

We shall notice here a few of those things which influence the condition of the sick, and which naturally come to be spoken about in any treatise on sick-nursing, and we shall speak first of all of a subject whose bearing upon the condition of the sick is of vital importance, but which is often grossly neglected in their management.

CHAPTER II.

VENTILATION.

IT appears almost superfluous to say, "See that your sick-room is properly ventilated," and yet nothing requires to be more frequently reiterated, because nothing is more often neglected than this. A moment's thought would seem sufficient to convince anyone that to breathe over and over again the same air, unchanged and loaded with impurities, was not conducive to health, but contrariwise was a fruitful source of disease—and yet, however apparent this might seem to be, it is a sad fact that nothing is more persistently disregarded; the sick-room continues badly ventilated, and the patient, already weakened by disease, is subjected to the depressing and poisoning influence of impure air.

Proper Supply of Air.

Do we wonder that disease remains so long with us, that its virulence is so greatly increased, and that death snatches so many victims, where the health-giving influence of pure air is thus ignored? By a proper supply of pure air in health, how much sickness might be avoided; by a sufficient supply in disease, how

many deaths averted! And yet we are heedless of all this, and from day to day go on inhaling impure air, and coop it up in our sick-rooms until the atmosphere we breathe is laden with the germs of death.

Impure Air.

All this may seem strange, and so indeed it is, but it is no fanciful picture that is here drawn, but a great and solemn reality. After inhaling the fresh air, go into the dwellings of some of our sick, and your sense of smell cannot fail to be shocked by the closeness of the atmosphere; and yet in these dwellings there are sufferers from disease occupying the same apartments with those in health, and the healthy and the diseased are subjected alike to the same poisonous influences. Do you wonder that disease spreads and that many die? Do you wonder that when fever breaks out its ravages are terrible? Surely the consideration of such facts as these should impress us with the necessity of having an ample supply of pure air during health, and seeing that the sick are not deprived of its blessing when it is most required.

How Air of Apartments is Rendered Impure.

From the surface of the body there is constantly passing away into the surrounding at-

mosphere a large quantity of effete matter in the form of perspiration, and mingled with this are the organic impurities from the skin. Besides these there is given off from the lungs, during expiration, a large quantity of watery vapor laden with carbonic acid. The amount of water thus given off varies from twenty-five to forty ounces in the twenty-four hours.

Further Causes.

As further causes of impurity we have, in addition to those already mentioned, the products of combustion of lights, the products of simple uncleanliness of rooms or persons, and the products of solid or fluid excreta retained in the room. In the case of the sick, where the exhalations from the body are increased, and effluvia from discharged excretions are superadded, the atmosphere of an apartment is soon vitiated and rendered unfit for the purposes of respiration, and hence the demand for pure air becomes more imperative, and the necessity of complying with that demand even more essential than in health.

How Thorough Ventilation May be Accomplished.

Many people are under the impression that in order to have a sick-room thoroughly ventilated the

patient must be constantly shivering from cold, but this is altogether a mistake. It has been frequently remarked that the mere admission of cold air into a room does not imply its proper ventilation, however large the quantity may be; for the air so admitted may have come from a hall itself badly ventilated, or from unoccupied rooms the windows of which are never opened. In the true sense of the word, ventilation means the removal of impure air and the replacing the air so removed by an efficient supply of pure air, and for this purpose nothing answers so well as a window and an open fire.

Artificial Methods.

Many artificial methods of ventilation have been invented and employed with varying results; but none are so useful, because none are of so universal application, as the system of ventilating by means of the window and the fire. And yet how often we find these means of ventilation neglected, and the patient breathing an atmosphere prejudicial in the highest degree to his recovery, from carelessness on the part of the nurse. Earnest attention should be paid by those who have the care of the sick to see that these things are not neglected. In opening the window there is

no necessity that the patient should feel cold, and care must be taken that he does not. The bodily temperature must be carefully maintained, and an extra supply of blankets or hot bottles to the feet supplied whenever these are necessary.

Draughts of Air.

Sometimes the bed is so placed that whenever the window is opened the patient is exposed to a draught, with all its evil consequences. In order that no risk may be run the bed should be removed at once, and placed in such a position that all harm from this cause shall be obviated. Care should also be taken that while the door of the sick-room remains open the window is closed, otherwise the patient may be exposed to a draught.

Condition of Fire.

The condition of the fire ought also to engage attention, as without due regard to this the ventilation may be very imperfectly carried on. It must not be permitted to get too low and then be suddenly heaped up with coals, as by so doing the room will be filled with smoke, and the patient subjected to much unnecessary inconvenience in consequence.

Chamber Utensils.

What a source of atmospheric contamination is to be found in chamber utensils that have been used being allowed to remain in the room! Frequently these are placed under the patient's bed, where they are allowed to remain till the nurse finds it convenient to remove them. This ought never to occur. Whenever a chamber utensil has been used it should be removed from the sick-room (and should always be so covered), and before bringing it back it should be properly rinsed. On no account should it be allowed to remain even for a few minutes in the room.

Slop-pails.

Slop-pails should, under no consideration, be admitted into the sick-room. Their employment is only an encouragement to laziness, and much harm to the patient may be the result. Cooking, and everything that would render the air of the sick-room impure, must not, of course, be done there; besides, a patient is much less likely to partake of food that has been cooked in his presence than he is of that which has been prepared out of his sight, and brought to him in as enticing a manner as possible.

Night Air.

A great dread prevails in this country in regard to night air, and many, even in health, prefer to sleep in a close and stuffy atmosphere and awake in the morning unrefreshed, rather than have the window of their bedroom down a few inches from the top. And when we see such fear existing in health with regard to night air, can we wonder at the careful manner in which it is excluded from the chamber of the sick? We fancy when the window is closed that we have shut out this deadly enemy, and that we may rest in security; and yet what have we done? Have we, by closing the window, excluded the night air, and if so, what are we inhaling instead? It requires little reflection to show us that at night we must breathe night air. There is no alternative, and the question we have to settle with ourselves is whether we will have it pure or impure. We cannot be made to feel the warming influence of the sun's rays on the air we breathe, while he is shining on lands far distant from our own, and yet it seems strange that so few should think of this.

Malarial Countries.

In those countries where malaria abounds, exposure to the night air may be looked upon

with dread, but here we have no such cause of terror. We should therefore see that our patient is properly supplied with abundance of pure air, not only during the day, but also during the night, and that the ventilation of the sick-chamber is not carried out with efficiency during one-half of the twenty-four hours to be neglected during the other. Thorough ventilation is equally demanded at all times, and where it is neglected the sick must suffer.



CHAPTER III.

LIGHT.

NEXT in importance to securing for the sick-room a sufficient supply of pure air, it should be our endeavor to see that it is also amply provided with light. There is an Italian proverb which says, "Where the sun does not enter the doctor does;" and another which says, "All disease comes with the shade and gets well by daylight;" and although the language here used may seem to convey a somewhat overdrawn picture to the mind, there is, nevertheless, much of truth in it; and it ought to impress us with the necessity we labor under, of giving earnest attention to such matters in the treatment of disease. Where darkness is, vice and crime abounds, dirt and filth accumulate, and disease, especially of an infectious type, spreads with awful rapidity, and death has many victims. But besides these, feebleness of body, rickets and scrofula in children are the consequences of darkness and what darkness breeds; also mental degeneracy abounds.

Diseases Caused by Want of Light.

Should these things be doubted, let those who disbelieve them go to some of the slums of our large

cities, and there, in the miserable and squalid children that will gather round them, let them recognize the truth, and ascertain for themselves the effects of living in darkness, with its attendant filth and necessarily impure air. Compare these children with those who have been brought up in some of our rural districts, and been exposed to the health-giving influence of the sun and pure air; and you cannot fail to perceive how great the contrast is, and to recognize the important part which is played by the sun's rays both in health, in maintaining it, and in disease in recovering to health again. It has been well remarked that of all flowers the human flower has most need of the sun, and just as plants grow *towards*, not *away from*, the light, and become sickly and die without it, so does man turn naturally towards the light to be partaker of its revivifying power, without which he also must sicken and die.

Build Houses for Health.

In planning our houses we do not think of providing a room with a few extra conveniences and with a proper situation, that may act as a sick-chamber, and yet how many families are there where such is not required? It is thought that any sort of room may answer this purpose; but it is necessary.

where no provision has been made, to select carefully the apartment that is to act as a sick-room, and in doing so it should always be made an essential that the situation of the room is such as to admit a plentiful supply of light at all hours of the day.

Special Cases.

There are, of course, special cases, such as diseases of the eye, where the plentiful supply of light would prove absolutely injurious; but of these we do not at present speak.

Too Strong Light.

If the light be too strong for the patient's eyes it can easily be modified by means of a green blind. As light, when excessive, acts as a direct excitant upon the brain and nervous system, it will be the duty of those who wait upon the patient to see that in acute diseases, where there is nervous excitement, the room is properly darkened, and he is shielded efficiently from what might prove injurious to him; but in cases of debility, in chronic diseases, and during convalescence, the sun's rays are ever welcome, and exercise the most beneficial influence alike on mind and body.

The Sun a Great Purifier.

But besides being thus beneficial the sun's rays exert a great oxidizing power upon organic mat-

ters, and by reducing them to the simpler constitution of mineral substances, render them innocuous. *The sun* is a great *purifier*, and where his presence is excluded, as in rooms which have been kept closed and the shutters unopened for some time, mould and fungi accumulate, and hence the musty smell felt on going into such apartments. It has been remarked that on the shady side of deep valleys cretinism abounds; that in cellars and unsunned sides of narrow streets there is degeneracy and weakness of the human race—mind and body equally degenerating.

Effects of the Sun's Rays.

The great influence exerted by the sun's rays on the process of vegetation is familiar to us all, and physiology teaches its equal importance in the growth and development of man. Without light, during growth, the human flower cannot attain to perfection. Now it must not be thought that the influence of the fire in the sick-room, however useful for purposes of proper ventilation, can ever replace that of the sun's rays. They are both necessary, and where each receives that attention which its importance demands, the patient will have been placed under those conditions which are most favorable to recovery.

Position of Bed as to Light.

The manner in which the bed is placed in the room should be carefully attended to. It must not be so placed that the patient has to strain himself every time he wishes to look out of the window, but must be so placed that he is able to do so without making any effort. It is very important that the patient should be able to see out of the window, and that, if possible, the prospect should be a pleasant one. Thus a garden or a green field will engage his attention and exert a beneficial influence upon him.

Flickering Light.

All flickering lights should be at once removed from the sick-room, otherwise their presence cannot fail to exert a disturbing influence upon the patient. A little care and attention in regard to these apparently trivial matters will save much unnecessary annoyance at a time when suffering makes it ill to bear, and will greatly conduce to a speedy recovery.

Artificial Light.

At night, care must be taken to place the lamp, or whatever is employed for the purpose of artificial illumination, in such a position that the eye does not suffer. In the case of children, attention to this is very important, for a

lamp carelessly placed may cause shadows about the room which may make the child frightened and uneasy, and exert a hurtful influence upon it which might have been obviated by a little thoughtfulness on the part of those who had the placing of it. Also impure oil, or an uneven, fan-like flame, may cause the lamp to smoke, and so prove a source of annoyance to the patient.

CHAPTER IV.

TEMPERATURE.

THE temperature of the sick-room should be a matter of primary importance, and yet it is frequently neglected as if it were not essential in the treatment of disease. It requires little reflection to perceive that where this is unattended to or badly done much mischief to the patient must result; and yet how often are all precautions to keep the air of the sick-room uniform in temperature, ignored, and to how many changes is the sufferer frequently exposed during twenty-four hours! We wonder sometimes how our patients can have caught cold, and when they complain of headache, running at the nose and

eyes, and other symptoms of ordinary *catarrh*, we are at a loss to explain their appearance, and yet the explanation is not far to seek.

Fever or Chest Affections.

Those suffering from fever or from chest affections cannot fail to be affected by the temperature of the apartment in which they lie; and yet how often do we find the sick-room allowed to get close and overheated, and the window, which till now has been closed, thrown suddenly open to allow a supply of fresh air to enter the room! Or again, the window may have been kept open a few inches and the air may have been entering the room imperceptibly, but in sufficient quantity to keep the atmosphere cool and fresh—when the nurse, who has allowed the fire to get very low, suddenly takes to heaping it with coals, and after perhaps filling the room with smoke the fire blazes up, the cold air rushes in with greater rapidity, and the patient suffers from what might easily have been prevented, and what never ought to have occurred.

Fire in the Sick-Room.

A good fire in a sick-room, kept burning equally, will suffice to maintain a uniform tem-

perature; but care must be taken to have a good chimney. The imperfect action of chimneys may be due to many causes—thus, the flue may be too wide or too narrow, the draught may be insufficient, or the chimney may be placed on the same side of the room as the door.

Thermometers in Sick-Rooms.

In order to maintain the temperature of the sick-room as exact as possible, the thermometer should never be absent from the apartment; but in order that the information derived from it should be correct, it must be placed on the same level as the patient, otherwise we do not ascertain the temperature of that stratum of air which he is breathing. Again, besides placing the thermometer on a level with the patient, we must be careful not to place it in such a position as to give us incorrect information; thus, by placing it between two doors where it would be exposed to a cool current of air, or by allowing it to remain in immediate proximity to a lamp or the gas, we should not be obtaining the correct temperature of the room.

Best Temperature.

The temperature which answers best in the sick-room in most cases is one somewhere between

57.2° and 60.8° Fahrenheit. Should it be found desirable to increase this, it can be easily done by permitting steam to pass into the room from a kettle; or if, on the other hand, it is necessary to cool the air of the apartment, this can be readily accomplished by placing a shallow dish, containing pieces of ice, in the room, or by suspending a piece of cloth that has been previously moistened with water.

CHAPTER V.

FURNISHING OF THE SICK-ROOM.

NO article of furniture that is not required either by the patient himself or by the attendants should be allowed to remain in the sick room. If there is sufficient space in the apartment to accommodate conveniently two beds, the twenty-four hours can be divided between them, the day being passed in the one and the night in the other. Such an arrangement as this is often of great advantage to the patient, allowing, as it does, of thorough airing of both beds, and securing for him, in many instances, that refreshing sleep that is so helpful in the removal of disease. Should the room be too small to

admit of two beds remaining in it, and the patient be in a fit state to be removed from bed, he may be lifted on to a sofa, where he may recline till the changing and airing of the bed is completed.

Position of Bed.

The position of the bed must also be attended to. It should not be placed in a dark corner, as uncleanliness is apt to be fostered in such localities, and, as before remarked, it should be so situated as to enable the patient to see out of the window without difficulty.

Bedstead for Sick-Room.

The best and most convenient kind of bedstead for the sick-room is one made of iron, and not standing too high from the ground. Curtains round the bed ought to be dispensed with altogether; in the case of infectious diseases they afford lodgment to the poison and increase its virulence many fold. The best kind of mattress is one made of hair, which admits of being frequently opened out and exposed to the air. A hair or straw pillow is much better and cooler for the head than one of feathers.

The old wooden four-post beds, with their dense hangings of curtains and their feather mattresses,

are now happily being done away with, and others more productive of health and comfort are quickly taking their place. These feather beds, by absorbing moisture and miasms, and retaining the offensive discharges from the body, are productive of feverishness and great discomfort to the patient, and ought not to be used.

Bedclothes.

Patients are apt to be overloaded with blankets, and their breathing, already sufficiently hampered by disease, is still more impeded by the weight that is laid upon their chests. Only light blankets should be used as a covering for the sick, and heavy, impervious counterpanes should be avoided. Some patients have a bad habit of sleeping with their head under the bedclothes; this should be guarded against, and where any tendency to it exists in health, as it frequently does in children, it ought to be corrected before it has formed itself into a habit.

Arranging Pillows.

In arranging the patient's pillows, care should be taken not to pile them too high, and thrust the head forward upon the chest. Frequently this error is committed, and the breathlessness from

which he suffers is greatly aggravated in consequence.

Other Furniture.

The other articles of furniture which are necessary in the sick-room are two tables, a wash-stand, a chest of drawers, one or two chairs and a sofa. One of the two tables should be small and easily movable by the patient himself, and should be placed at the bed-side. The other should be sufficiently large to contain the medicine bottles, measure-glasses, spoons, etc., which are in constant use. The wash-stand should be provided with one or two basins, and a plentiful supply of water should always be at hand ready for immediate use.

The Chest of Drawers.

The chest of drawers ought to contain clean towels, old unsoiled linen (soiled linen must never be allowed to remain about the sick-room), scissors, pieces of tape, pieces of sticking plaster, and sundry other things that are likely to be in requisition. Should there not be sufficient accommodation for a sofa, an invalid or reclining chair ought to be provided, and should be so made that the patient can enter it with ease, and have efficient support while in it.

Mirrors, Carpets and Pictures.

If the room already has a mirror in it, it had better be removed, or if allowed to remain, it must be so placed that the patient cannot see himself in it while lying in bed. Unless the case be one of fever, the carpet need not be removed from the room if it is already there. The walls also should be hung with pictures; they exert a very beneficial effect upon the patient, and ought always to have a place among the furniture of the sick-room.

Flowers in the Sick-Room.

A great dread used to prevail with regard to the admission of flowers into the sick-room, lest by their presence the atmosphere should be polluted, but the quantity of carbonic acid given off during the night by the few flowers that one usually finds, is so insignificant as ought not to give rise to the slightest alarm. Moreover, the variety of form and color which they present are grateful to the eye, and the influence they exert upon many a poor sufferer is often of the most beneficial kind.

CHAPTER VI.

FOOD.

TOO much attention cannot be paid by those in charge of the sick to the careful regulation of the patient's diet. How many suffer, especially among the poorer classes, from utter disregard of this important item in the treatment of disease! How many of the ailments from which children suffer are attributable to errors in connection with their diet! How often, when an infant is suffering from the effects of an overloaded stomach, does the mother, in her mistaken kindness, increase its misery by giving it food! The proper dieting of children is as yet but little understood; they are allowed to partake of all sorts of suitable and unsuitable articles of diet, and frequently on asking what food an infant of eighteen months or two years has been having, you are told that it has just been taking whatever they (the parents) happened themselves to be taking at the time. It is a fact sufficiently well ascertained that errors in diet are at the root of a vast amount of disease and death, and yet it is with extreme difficulty that the popular mind is brought to see it.

Since in health it is so necessary for its maintenance and the avoidance of disease to supply the body daily with a sufficient amount of food of proper quality and given at regular intervals, how important does attention to these matters become in the time of sickness, when the energy of the body is almost exhausted. Badly-cooked food is a frequent cause of indigestion in the healthy, and must on no account be admitted into the sick-room. Consider the enfeebled state of the patient's digestive powers; how little it will take to disturb them, and how necessary it is to save him as much labor as possible.

Regular Intervals.

Again, food must be given at regular intervals, which must be determined by the nature of the case. In some diseases it requires to be given frequently, once every hour or two, but in small quantities at a time.

Untouched Food.

If a meal has been brought to the patient and been again taken away from him untouched, it would be very wrong indeed to allow him to fast till it was time for the next; the probability is, that when the time for partaking of the next meal had arrived, he would

be found less able to eat than he was before. It is better to prepare something shortly after the ordinary meal has been refused, and bring it to the patient unexpectedly, and in as entic-ing a form as possible; and in many cases where this is done you may have the satisfaction of seeing the sick one eat, and that with an apparent relish, and find that your labor has not been in vain.

Eat When Hungry.

Many patients who have been unable to take food when brought to them at the regular time, will rather suffer the opportunity when they felt a desire to eat, to pass by, than ask for anything. Especially is this the case when any extra trouble is made much of, and when any little favor asked is done in a grudging spirit. Much more kindness is shown to a patient by doing a spontaneous act, such as we have mentioned, than might at first be imagined.

Prepared out of Patient's Sight.

Everything that is intended for the patient's use should be made ready out of his sight, and be brought to him in as neat a form as possible, and with all the dishes scrupulously clean. Patients are very particular in regard to these

things, and when food is brought to them in dirty dishes, or with half of it spilled about their tray, it is no wonder they refuse to take it. A disagreeable loathing for a certain kind of food may thus be given rise to, which the patient may not be able to overcome during the remainder of his illness.

Small Amount at One Time.

Large quantities of food should not be brought to the patient at one time; he is much more likely to be enticed to eat by a smaller amount. It is better not to trouble the patient by asking him what he thinks he could eat; rather exercise your own judgment, unless the medical man be in attendance, when, of course, his instructions with regard to diet, as with everything else, must be strictly adhered to. Should the patient express a desire for any special article of diet, or for food done in a certain way, his request should, if possible, be granted.

Punctuality.

Punctuality in bringing patients their food ought also to be attended to; neglect of this may lead to much harm. If a patient expects his meal at a certain hour, and has to wait ten minutes or a quarter of an hour for it, it is quite possible

that he may be unable to partake of it when brought. Attention to these apparently trivial matters may appear quite unnecessary, but to the patient they are of vital importance, and ought therefore not to be neglected; and the careful nurse will consider no part of her duty mean or insignificant that conduces to the well-being of her patient, and tends to further his recovery in the smallest degree.

Quiet to be Observed During Meal Hours.

Strict quiet should be maintained in the sick-room during meal times, and the opening and shutting of doors and bustling about the room should be, as far as possible, avoided. The attention of the patient ought on no account to be occupied, while he is eating, with thinking over questions that have been addressed to him and answering them. He should be kept perfectly undisturbed, and allowed to take his meals as deliberately as possible.

Common Sense.

There are many opportunities occurring from time to time in the sick-room for the exercise of common sense, and the closer the observation of disease is on the part of those in attendance the more frequently will this be called into exercise,

One or two illustrations may serve to convey a more definite meaning to the reader's mind. Should the medical attendant, for instance, order a certain quantity of food to be given at stated intervals, and should the quantity ordered be invariably rejected from the stomach almost as it was swallowed, it would be very wrong to allow this to continue; and if the professional visits are only being made occasionally, say once or twice a week, the patient might very easily be rendered much worse unless common sense were used. Don't persist in giving always the same quantity; try him with half, quarter, or even less, till you get the stomach to retain it, when the amount given at one time may be gradually increased as the stomach can bear it.

Patients Unable to Take Food.

Again, should a patient be unable to take food at any stated time, but express an ability to do so at some other time, it ought not to be kept from him. Frequently patients who are unable to take anything at regular meal times feel a desire to eat half an hour or an hour afterwards, and this desire should not be disregarded. Examples such as these might be multiplied indefinitely, but those given may serve to illustrate the necessity there is for close observance

of the sick, and for the proper exercise of common sense on the part of those who are in constant attendance upon them.

CHAPTER VII.

CLEANLINESS.

WITHOUT scrupulous attention to cleanliness in the sick-room, all that has been accomplished by ventilation will prove useless; for what amount of air must be hourly passing in at the window to compensate for the accumulation of dirt and filth in a room? It is surely the duty of those who have the care of the sick to attend to this. The health of the patient imperatively demands it at their hands, and if there is any neglect in the fulfillment of what renders his recovery more certain, a grave responsibility is incurred. How often, at the bedside of the sick, is the physician repelled by the odor of soiled linen, unwashed garments, in which everything loathsome has been accumulating for no one knows how long, and that from an unwashed body; and how glad he is, on completing a hurried examination, to get once more into the open air, and away from such an atmosphere of pollution! Does it

appear wonderful that the recovery of the sick should be retarded in such cases; that disease should frequently take a more malignant form, and that the mortality should be high?

Cleanliness of Room and Person.

In the treatment of disease, attention to cleanliness is of the utmost importance; it is impossible to carry out any line of treatment successfully without it, and with it the patient's recovery is invariably made more certain. Cleanliness in sick-nursing refers to cleanliness of the room itself, and to *personal* cleanliness.

Best Way of Cleaning Sick-Room.

The sick-room in which there is no carpet is likely to be cleanest, being free from those organic impurities which store themselves up in its substance; but, unfortunately, in most private houses the sick-room is carpeted, and we have to consider how the process of sweeping can be best accomplished, so that as little of the impurities retained in it shall reach the patient as possible. This can be best done by sweeping with a soft hair broom, taking care to move the dust gently before it, and not raise it in clouds about the patient; but the only way by which a carpet can be really "cleaned" is to take it up every

quarter or half year. Should the floor of the sick-room be uncarpeted, it can be gone over with sponges wrung out of hot water, and dried by means of the floor-brush. Damp cloths may be used instead of sponges. By this means the sick-room can be kept clean.

Dusting Furniture.

The articles of furniture should also be dusted by means of damp cloths, otherwise the dust is only dispersed throughout the room to fall again, shortly, on the patient and the articles of furniture alike. The floor of the sick-room may be washed if the patient is able to be removed to another room. This must not be done on a damp day, as the room should be perfectly dry and free from all traces of damp on the patient's again coming into it. The bed-pan and chamber utensils must be kept scrupulously clean, being removed from the room whenever they have been used, and carefully rinsed and disinfected before being brought into it again.

White Walls for Sick-Room.

The walls best suited to the sick-room are those that have been painted, or those that have been whitewashed with lime. Papers on the walls act as dust-traps, and, unless they are removed, and

the walls scraped from time to time, they are apt to act injuriously on the sick. When fever patients have occupied a room, the walls of which are papered, it is necessary on their recovery to have the walls properly washed and scraped, because, as is well known, poison from infectious diseases may cling to the paper on the walls or to curtains for an indefinite length of time; and unless such precautionary measures are employed, the disease may be propagated.

Poison in Paper.

There are many papers which, besides acting injuriously by retaining dust and germs of disease, are themselves sources of poison to human beings. Such are the papers which owe their color to arsenic. If we consider how much of this poison may be inhaled during twenty-four hours by those who inhabit rooms, the papers on whose walls owe their color to arsenical preparations, we shall not be greatly astonished at the results we sometimes see.

Light Colored Paper.

If any paper is put upon the walls of the sick-room, it had better be a light-colored one, because, in addition to the fact that the dust will be more easily detected where such a paper is

used, and the room, in consequence, be kept cleaner, it will be more lightsome for the patient, and exert a more beneficial influence upon him than a darker and more dingy one would.

Bedding.

In regard to bedding, the utmost cleanliness must be observed; and in order to render this easier, the iron bedstead and light hair mattress already mentioned will be found superior to anything else that can be made use of. By means of this bedstead free ventilation can be carried up to the mattress. The old wooden bedsteads and feather beds, by being very hot-beds of filth and dirt, soaking up discharges and emanations from the body, and retaining them in their substance, acted most injuriously on those in health, and doubly so on those enfeebled by disease. It need hardly be said that, for purposes of strict cleanliness, these must be banished the sick-room.

Order in the Sick-Room.

To ensure cleanliness there must be order; everything should have a place of its own, and, unless in use, should be kept in it. Unused articles of food and scraps of every kind should be removed from the sick-room.

Attention to the few foregoing rules will secure to the patient that comfort which is the result of cleanliness, and which is so essential in the treatment of every disease.

Personal Cleanliness.

On the subject of personal cleanliness a word or two remains to be said. It might almost seem at first sight superfluous to insist on the necessity, in time of disease, of keeping the patient's body clean, and yet it is a fact that nothing is more frequently neglected.

Care in Changing Linen.

Among the poorer classes especially, this want of regard for personal cleanliness in the sick is often witnessed to a lamentable extent, but it does not confine itself to these alone. By those who presumably are better informed, there is often much ignorance displayed in regard to this matter. How often, for instance, is the body linen allowed to remain unchanged for several days, frequently longer—linen that is already saturated with the increased exhalations from the body that occur during sickness, and which cannot fail to act injuriously upon the patient! Frequently, on inquiry, the cause is found to be fear lest the patient should catch cold during

the operation; but surely, with a little care to see that everything is properly aired—not in the abominable sense of being worn by somebody else, as used formerly to be done, but by hanging for some time before the fire—no harm is likely to occur.

Use Soap and Water—Comb and Brush.

How often are physicians called to visit a child whose bed is one mass of confusion, and whose comforts, in the way of personal cleanliness, are very few indeed! Uncombed, unwashed, unchanged, is it any wonder that the little sufferer is irritable and restless, hot and feverish? Insist upon the application of soap and water to the face, attention to the hair, and a change of linen to the body—and mark the change! Before, his features could scarcely be recognized from the thick layer of dirt that covered his skin; he was restless and irritable from the soiled linen chafing his skin; but now he is altered; his features are distinctly seen, and the expression on his face is one of pleasure and happiness, arising from the comfort which personal cleanliness brings with it. He can now lie easily, and the restlessness that aggravated the fever is gone with the cause that gave rise to it;

and the skin that felt hot and burning is now cooler and less harsh to the touch.

Ablutions.

It seems strange that in the time of sickness, when the secretions from the body are no longer those of health, when the action of the skin is impeded, when the breathing is quick and hurried, at the very time when you are desirous that the pores of the body should be acting vigorously and the lungs inhaling pure air, the daily ablutions should be suspended, and the lungs be supplied with air loaded with organic impurities. That this want of cleanliness is so frequently met with during the time of sickness, arises partly from neglect and partly from prejudice. Should it be due to neglect, those in charge of the sick must be reminded of their duty, and attention to personal cleanliness minutely insisted upon; but prejudice is much more difficult to contend with. If people are lax in regard to the carrying out of personal cleanliness during health, they are apt to be neglectful of it altogether in time of sickness; hence the care that must be taken to impress them with its necessity.

Washing Not Hurtful to the Skin.

There is a great dread in the minds of many that the changing of the body linen in disease

will prove hurtful to the patient. This, it need scarcely be remarked, is altogether unfounded; and, if properly done, the changing will always have a beneficial influence. It is well known that new linen absorbs more moisture than old, and by so doing assists perspiration, besides being grateful to the patient, from the comfortable feeling it imparts.

Hands and Face Washed.

It is important in the time of disease, as in health, to have the hands and face washed daily, and to have the hair carefully combed out, so as to allow free circulation of the air about the roots, and by so doing keep the scalp cool. If this is neglected, the hair, especially the long hair of the female, will become matted with the retention of perspiration, and may require to be cut if attention is not paid to it in time. Nor must the body be neglected. It should be frequently washed. A sponge or piece of flannel and tepid water should be used, and care must be taken to expose only a small surface at a time, which ought to be rapidly dried with a heated towel or piece of flannel. In the process of drying, much good will result from rubbing the part well. In acute diseases it is

well to change the body linen every day; it greatly adds to the patient's comfort.

CHAPTER VIII.

TRANQUILLITY.

TRANQUILLITY in the sick-room, it need hardly be said, is most essential to speedy recovery, and that neglect to insure it to a patient will retard progress, throw him back, and so prove injurious to him; and yet how often in the course of a disease has the poor sufferer to pass a restless and wakeful night from want of attention in regard to this matter! If a patient has fallen asleep and you shortly after wake him up by the slamming of a door, or the overturning of some article of furniture, the chances are that sleep will forsake him, that his pain will be aggravated, and that after passing a troubled night, he will be found in the morning feverish and unrefreshed. These things demand earnest attention from those who are in attendance upon the sick; and while to those in health they may appear insignificant, they are weighty matters in the treatment of disease.

Injurious Noises.

Some kinds of noise are more injurious to the sick than others, particularly those which give rise to any straining effort of the mind. Thus, to talk in a whisper is very objectionable, because the patient's attention is roused, and he naturally strains every nerve to hear what is being said. The effect of this straining is to cause exhaustion afterwards, which may last for a considerable time.

Noises in Sick-Room.

When the door of the sick-room is being opened, it should be done expeditiously and with as little noise as possible. When the door has been opened, it is a very common habit for nurses to stop and ask questions. This should not be done. The effort of raising the voice may prove hurtful to the patient; rather close the door again and come back to the bed-side for the information you desire. On coming into the sick-room there should be as little excitement as possible. All calling and shouting from tops of stairs for articles that have been forgotten should be strictly prohibited. The room immediately over the sick-room, should, if possible, remain unoccupied, as all noise there is very trying to a patient. In bringing food to a patient, or re-

moving the dishes after he has eaten, anything like rattling of cups and saucers, bowls and plates, should not occur. When a patient has been made right for the night, nothing should be allowed to happen that is likely to disturb him; otherwise he may remain awake for hours.

Talk Outside the Door.

Equally objectionable, and for the same reason, is it to talk outside the patient's door. All conversation with the friends or attendants by the physician, if not conducted in the patient's hearing in the sick-room, should be so in an apartment sufficiently distant to be altogether out of his hearing. If the nurse has any question which she wishes to ask the doctor, let her not wait till he has got outside the door of the sick-room and then stop to ask him there. A patient is peculiarly alive to everything that is being said, and will anxiously and breathlessly listen to any conversation, the sound of which reaches his ears.

Other Disturbances.

There are other causes of disturbance to a patient, such as the creaking of doors and the flapping of window-blinds, which are peculiarly annoying, and ought not to occur. A little care on the part of the nurse should prevent the oc-

currence of anything of this kind. A heavy footstep which causes the floor to shake is most unbearable to the sick. The rustling of a silk dress is also a source of annoyance, and so should be avoided by those in attendance upon the sick. Let the material of which the dress is made be such as to cause no sound in moving about the room.

How Obtain Good Night's Rest.

In order to secure for the patient a good night attention must be paid to see that the bodily heat is maintained. Sometimes this is neglected, and the patient's feet are allowed to become cold, and his body to receive a chill, through fear of disturbing him. The application of a warm bottle to the feet towards early morning will not be a cause of much disturbance to the patient, and may secure him a good night, with a consequent alleviation of his sufferings on awaking. Many undoubtedly suffer from carelessness on the part of the attendants in regard to these matters.

Friends in Conversation.

The admission of too many people into the sick-room is another fruitful source of harm to a patient. Many friends, doubtlessly well-intentioned, come in and keep up an incessant con-

versation, either among themselves, or with the patient, and so do him an injury. While they are there the patient is probably flushed, and they tell him he is looking so much better; but could they see the same patient some time after they have left, and when reaction has occurred, they would probably find reason to change their hastily-formed opinion. When the physician has ordered the room to be kept quiet, every effort should be made to do so, and the entreaties of friends who insist on seeing the patient must be resisted. Frequently, during convalescence, the visits of friends, unduly prolonged, produce an effect of depression and debility upon the patient which greatly tends to hinder recovery. If careful attention were given to securing to the patient tranquillity during disease and convalescence, recovery would be more speedy and complete, and relapses much less frequent than they are.

CHAPTER IX.

GOSSIP.

NOTHING is more obnoxious in the sick-room than gossiping friends, and nothing more productive of harm to the patient. They should be excluded from the sick-room altogether, as their presence is unwelcome to every sufferer, and besides being unwelcome, is positively injurious. By the stories which they tell, they tend to destroy that evenness of mind which is so necessary to a patient's recovery, and are apt to diminish his confidence in the physician who is in attendance upon him. If part of the patient's symptoms are cough and pain, they tell how Mr. So-and-so, a very intimate friend of their own, had a cough exactly similar, and suffered from the same excruciating pain, and how by this or that external application, or the employment of some particular drug, they were immediately and completely relieved. Now all this is most unkind, because both cough and pain are symptoms of many different diseases, which they in their ignorance cannot possibly have any idea of; and besides, it is very apt to lead to distrust in the patient's

mind of the physician who is in attendance, and to neglect in pursuing the line of treatment which he has laid down.

Friends in a Sick-Room.

The friends of the sick should be careful themselves not to entertain for a moment any advice that is so given, and should do everything in their power to dissuade the patient from doing so. When one comes to inquire a little more minutely into the history of the cases they relate, their information is generally found to be derived, not from self-observation, but from some second individual, who is in every respect most trustworthy, and who, they are sure, only related the case to them as it occurred. Now is it not most injudicious to subject a patient to the torture of listening to all this nonsense? It is really wonderful how many misguided friends there are who are ready to act the part of medical advisers during the time of sickness, and how many remedies are suggested to the poor sufferer for his employment.

Illustration.

The following anecdote, taken from a work by Laurent Joubert, a physician of the sixteenth century, is related by Professor Fonssagrives in

his book called the "Mother's Work with Sick Children," and may serve to illustrate these remarks. "It is said that the Duke of Ferrara, Alphonso de Este, once propounded the query of what trade contained the greatest number of persons? One said the shoemakers'; another, the sewing people's; another the carpenters', the pettifoggers', the laborers'. Gonelle, the famous buffoon, said that there were more physicians than any other sort of persons, and offered to bet with the duke, his master (who flatly declined the honor), that he would prove it within four-and-twenty hours. The next morning Gonelle set out from his abode with a great night-cap on, and his chin bandaged up with a handkerchief, then a hat over all, and his mantle thrown over his shoulders. In this guise he took his way towards the palace of his Excellency by way of the *Rue des Anges.* The first person he met asked him what was the matter with him, to which he answered, 'An atrocious toothache.' 'Ha! my friend,' said the other, 'I know the best receipt in the world for that,' and he rehearsed it to him. Gonelle wrote his name upon his tablets, pretending to write the receipt. A step further on he passed two or three who put the same question to him, and each one gave

him a remedy; he wrote down their names as in the first instance. And thus pursuing his course through the remaining portion of the street, he met no one who did not offer him some receipt, all differing the one from the other, each one telling him that his own was well tried, sure, and infallible. He wrote down all their names.

Arrived at the lower court of the palace, he was surrounded (being known to everybody) by persons who, after learning his trouble, insisted upon giving him receipts, each one said to be the best in the world. He thanked them, and wrote down their names also. When he entered the Duke's chamber, his Excellency cried out to him from afar off: 'Oh! what is the matter with thee, Gonelle?' He replied very piteously, and in a whining manner, 'The cruelest toothache that ever was.' His Excellency then said to him, 'Ah, Gonelle, I know something which would quickly banish your pain, even were the tooth spoiled. Master Antonio Musa Brassando, my physician, never made use of a better. Do this and that, and you will be cured immediately.' Gonelle at once threw down his head-gear and other appliances, exclaiming, 'And you, too, Sire, are a physician! Look at my

list, how many others I have found between my dwelling and yours. There are nearly two hundred, and I have passed through only one street. I will undertake to find more than ten thousand in this town, if I were to go all through it. Find me as many persons of any other trade.'"

Advice Given by Friends.

This anecdote may serve to show how common this habit of giving advice to the sick was in those days, and in our own it remains very much as it was then. Pity the poor sufferer who should endeavor to put into execution, for the sake of trial, the advice thus gratuitously given. How can he make use of *all* the medicines thus suggested? and is it not extremely injudicious, when a medical man is in attendance, to make any suggestions of this kind? Surely, he who has watched a case carefully through weeks and months of dangerous illness, and who knows all the peculiarities of his patient's constitution, is the one best able to give advice, to apply or withhold remedies as he sees fit; and yet it is strange how little this is considered. Disease is not a thing to trifle with; while we dally it is busy working, and to assist nature in her endeavors towards recovery requires careful and skillful management, which can only

be successfully carried out by those who are competent to do so.

Confidence in Medical Adviser.

In our care of the sick we ought to do all in our power to prevent the intrusion of anyone who is likely to shake a patient's confidence in his medical adviser. "He performs most cures in whom most trust," was the saying of the Father of Medicine, and it is as true of our day as it was of his. Any interference, then, with the treatment that is being pursued must not be permitted; and any suggestion of this or that remedy by well-meaning but ill-advised friends, should be ignored.

Poor Consolation.

How frequently, when patients are seriously ill, do we hear such people attempting to cheer them by the assurance that there is nothing the matter with them—as if the patients themselves were not better informed on this point than they. Surely, when a patient is dying, and knows that he is, it is little in the way of consolation to be told that he will soon be about again, that he only wants change of air, etc., to put him right. Such false hopes as these, a sick man does not want, and it is anything but kindness to

trouble him with them. He is not foolish enough to suppose that the opinion formed by such people from a cursory glance, can have any weight when placed side by side with the carefully formed opinion of the physician who has been in constant attendance upon him; but to tell them his reasons for disbelieving what they say would cost an amount of mental and bodily effort, which he, in his debilitated state, is ill able to bear.

Visits of True Friends.

These remarks have, of course, no reference to the *true* friend, whose visit is looked forward to by the sick with unfeigned pleasure; who, perhaps, remains a shorter time, and during that time says far less than any other, but speaks to the point, and in that kindly, sympathizing way that tells the patient how much he feels for him, and with him, and manifests that genuine sorrow in trouble so dear to the afflicted. If, after the visit of a friend, the patient appears cheerful and soothed, depend upon it such visits will exert a beneficial influence upon him; but should he, instead, appear jaded and fatigued, the influence will be of an opposite kind, and the recurrence of such visits should take place as seldom as possible, if they cannot be al-

together obviated. As any mental disturbance may prove injurious to our patient, it is well that his letters should be opened by a trust worthy friend, and only those parts read to him that are likely to exert a beneficial influence upon him. We shall consider this, however, more fully in the following article.

CHAPTER X.

INFLUENCE OF MIND ON BODY.

THAT there is an intimate relationship existing between mind and body, by which they act upon and influence one another, all must admit.

Body Gives Way to Mind.

In health, the influence of the mind strongly directed to a part and concentrated sufficiently long upon it, will produce, in the first instance, functional derangement, and afterwards lead to serious organic mischief. Thus when attention is directed to the heart, it beats with greater rapidity, and the individual is then said to suffer from palpitation; and should the palpitation continue unchecked for a sufficient length of

time, it leads to enlargement, or, as it is technically called, *hypertrophy*, of that organ. Now, when the influence of the mind upon the body under the ordinary conditions of health, may be of such a serious nature, how much more serious must that influence be when directed towards an organ already enfeebled by disease!

Preserve Quietude of Mind.

In health the changes which are observed to take place in the countenance of a person who is under the influence of shame or fear, must be familiar to all—the crimson cheek in the one case, the deathly pallor in the other—and when such wonderful effects are manifested when the bodily powers are strong and vigorous, how great must be the effect when these are debilitated by disease! Hence the imperative necessity for preserving the patient, as far as possible, from the influence of passion, and preserving his mind in that calm and equal state which acts so beneficially upon the body in the time of disease. If a patient's attention is always directed to the seat of suffering, his misery is aggravated and his pain greatly increased; but endeavor to withdraw his attention, and, if you succeed, you will allow the part that rest which is necessary to the successful

carrying out of those restorative changes which in disease nature is ever working.

How to Withdraw Patient's Attention.

But to withdraw a patient's attention from himself is no easy task, and frequently it lies completely beyond his own power so to do. Did we, however, instead of urging the necessity of this upon the patient, endeavor to lead his thoughts into a different channel, we should accomplish more for him, and succeed better in the attainment of the object we have in view, than by all the arguments at our command, however eloquently uttered. If you tell the patient that to habitually concentrate his mind upon himself is bad; if you tell him that by thinking about his disease he will aggravate the symptoms and increase his malady, and that by withdrawing his attention from the seat of suffering he is doing what is best to facilitate recovery and bring about a speedy cure—he will answer you that he is aware of all that, and will agree with everything you have said; but the mental concentration still remains, the symptoms are aggravated and recovery is delayed.

The fact is that the patient has not the power to cope with this influence so as to overcome it; and if, instead of urging him so to do, we

engage his attention involuntarily and get him thus thoroughly interested, we shall have accomplished for him, without an effort on his part, greater and more permanent results than could have been attained by many weary hours of arguing and advising. By thus engaging his attention involuntarily, you will have secured the desired rest to the part; and while he has been forgetful of his sufferings, be assured that the work of recovery has been going on. The best means by which to attain this end is to tell the patient a good story that has a pleasant ending, or read to him something in which he can feel interested.

Avoid Excitement.

Anything that weighs upon a patient's mind, producing care or anxiety, exerts a depressing influence upon the nervous system and tends to retard recovery. Everything of this kind should therefore be carefully guarded against, and, as far as possible, evenness of mind maintained throughout. To worry the patient with household affairs when suffering from disease is certainly not the way to bring about a speedy return of health and strength. There are, however, some people of peculiarly anxious temperament, who, when under the necessity of relinquishing

household duties, imagine everything to be going wrong during their absence, and are continually fretting in consequence. Especially is this most frequently met with in mothers who have large, young families. As far as possible the anxiety of such should be relieved by providing a thoroughly competent and trustworthy person to take her place. If this is done, her mind may be greatly relieved, and her recovery hastened. Let everything be carefully guarded against, the tendency of which is to cause excitement in the patient. Anything that does so is most injurious, and cases are not wanting where a sudden burst of anger has proved fatal.

Despondency.

Equally dangerous is it to allow anything of a depressing nature to weigh upon the patient's mind. Despondency or despair act as direct sedatives, and although their influence may not be so readily manifested as in the case of anger and those passions which give rise to excitement, they nevertheless are as certain in their effects, and anything that would lead to the one or the other, should be carefully guarded against. Should despair take possession of a patient's mind, and every effort be unavailing to drive it away, the effect upon the body is

soon apparent in the pallor and dejection which now show themselves, and in the gradual failure of the bodily powers that speedily supervenes.

Hope and Confidence.

Everything ought to be done on the part of those who attend upon the sick, to cheer them and instil hope into their minds, otherwise fear may take possession of them, and add to their danger by increasing the severity of the disease from which they suffer. The effect of inspiring a patient with hope and confidence in the means that are being employed—which is the daily work of the physician—can only be partially attained, unless his efforts in this direction are backed up by the efforts of those who are in hourly contact with the patient. In order to do this the physician and friends alike must impress the patient with the belief that interest is being taken in his case. . Anything like making light of a patient's sufferings must be carefully avoided, and any friend who is inclined to laugh a patient out of his troubles had better be kept away from the sick-room.

Constant Care.

Above all, let those in constant attendance upon the sick do everything in their power to

assist in maintaining the patient under the influence of those conditions of body and mind which are such powerful agents in their recovery, and strive assiduously to prevent the appearance of anything which would tend in an opposite direction.

CHAPTER XI.

OBSERVATION.

THERE is, perhaps, no habit so little cultivated by those who have charge of the sick, as observation. Attendants and friends alike fail in the exercise of it, and much information that would be of value to the physician is thus lost. How often when a medical man asks a question does he receive the most vague and misleading statement by way of answer! How frequently is the physician told that a patient has eaten nothing all day, when all that is meant is that his appetite to-day has not been so good as it was yesterday! When an attendant is asked, "How did So-and-so sleep last night?" it is not at all unusual for the physician to be told in reply that "he never closed an eye all night," when all that is meant is that his sleep was disturbed, and that he was

more restless than usual. Now, unless information given to the physician by the nurses and friends be correct, how can he arrive at a true knowledge of the patient's condition during the intervals ?

Ambiguous Reports.

All ambiguous language should be avoided in reporting to a medical man upon the condition of a patient, and guessing at the truth must never be attempted. When information upon any point is asked for, only that which is *definite* is desired, and that alone should be given. A physician would far rather have the nurse or attendant acknowledge ignorance in regard to what is asked, than that attempts which can only prove misleading, be made to answer his questions. If the information thus supplied should be misleading rather than guiding in its nature, the patient may suffer in consequence. A careful habit of observation on the part of those in attendance upon the sick cannot be too highly estimated, nor its culture too strongly recommended, while its absence must always be deplored.

Report only Facts.

The observation at the bed-side should only relate to facts. These, as before intimated, are

what the physician desires; all else, such as what the nurse or attendant thinks of this or that, is regarded as extraneous matter, and had better be left out. Now, although this kind of observation appears simple enough, it is just the kind that the physician finds the greatest difficulty in obtaining. Frequently, while the patient is lying and listening to what the doctor is being told with regard to his case, he could supply, were he able to speak or caring to do so, information that would be strangely at variance with what was being furnished by the attendants as a correct statement of the facts professed to have been observed.

Notes for Reference.

By the careful cultivation of this habit, how much valuable information might be daily and hourly stored up for guidance in the treatment of the case; and by clear and definite answers given to the questions addressed, the physician would be greatly aided in estimating the true condition of his patient. Should the memory be insufficient for the storing up of these facts, a note of them should be taken and kept for reference.

Facts to be Observed.

A few hints may now be thrown out as to the kind of facts which it is desirable for those who

have the care of the sick to observe. Facts with regard to food and sleep are of primary importance as objects of observation. If the patient has been ordered a certain quantity of beef tea at, say, twelve o'clock in the day, the quantity taken should be carefully noted and reported to the doctor at his visit. There are many nurses who carry food to a patient, and take it away again only half eaten, or perhaps scarcely touched, who are nevertheless quite ignorant of the fact, and who, if asked if the patient had taken what was ordered him, would answer that he had. Now, information of this sort is very misleading, and can scarcely be excused, since a little extra care and trouble would suffice to prevent its occurrence. It ought also to be observed whether in eating the patient does so with relish, or whether he rather forces himself to eat against his inclination.

What the Patient Relishes.

Any article of diet which the patient eats with greater avidity than another, and any peculiar article that he expresses a wish for, should also be carefully noted. Much valuable information may be obtained from the careful observation of this one point alone, because in certain diseases, especially connected with the nervous system,

there is peculiar craving for strange and altogether unsuitable things as articles of diet. The effect which the food produces upon the patient should also be carefully noted. Is he distressed after eating? Does he complain of fullness or other uncomfortable sensation over the stomach? Or, does he remain easy and free from pain? To be correctly informed in regard to these various details would enable the physician to judge more correctly of the patient's condition, and enable him to vary the articles of diet from time to time, as it might be found necessary. When any "fresh" article of diet is employed, its effect upon the patient should be particularly noted.

What Hours Patients Sleep.

With regard to sleep, the number of hours should be recorded, also which hours. Did he sleep during the early part of the night and remain wakeful afterwards—or, was he restless and wakeful throughout the first part of the night, and did he then fall into a troubled doze and awake unrefreshed in the morning? Careful attention to ascertain these facts is very important, as the remedy to be applied in the two cases is different. In the former, on applying external warmth, or giving food or stimulants, you will frequently put the patient under those conditions which shall

enable him to obtain undisturbed sleep during the remainder of the night; while in the latter, by administering some sedative, you obtain a like result during the earlier hours.

Kind of Sleep.

The appearance of the patient on awaking from sleep should also be observed, and the kind of sleep obtained, whether quiet and peaceful, or disturbed and rambling. By the careful observance of such facts the medical man will be put in possession of much valuable information which will serve to act as a guide in regard to the line of treatment most likely to act beneficially upon the patient. All facts thus observed by nurses and those in attendance upon the sick, and reported to the physician, will be carefully weighed by him, and due importance attached to each, and taken in conjunction with what he himself has observed, may prove of great service in the management of the case.

Pulse.

The pulse ought to be another object of careful observation. By attention to this, much valuable information is gained. Now, in speaking of the pulse, it is not only meant that the number of beats should be recorded—this can

be very easily learned—but there are other points in connection with the pulse which those in attendance upon the sick would do well to make themselves familiar with, and from which much true knowledge and clearer insight in regard to a case can be obtained. Thus, a pulse is sometimes found to intermit. The number of intermissions and the period of their occurrence should be carefully observed and noted down. In one pulse a beat may be wanting in every six or seven pulsations, or you may have a series of beats all succeeding each other in perfect regularity, followed by a series in which the pulsations are more or less irregular.

Actions of the Pulse.

Again, it should be noted whether the pulse is hard and raises forcibly the fingers with which it is being felt, or whether it is soft and compressible. There are other peculiarities in connection with the pulse which should also be learned. Thus, in aneurism the character of the pulse may be described as "splashing." When the contraction of the left ventricle of the heart is prolonged and forcible, it gives rise to a "full" pulse; that is to say, to a pulse, the volume of which is greater than usual. Fullness of blood, technically called *plethora*, also gives

rise to this kind of pulse; whereas anything which causes a general deficiency of blood throughout the body, gives rise to a pulse which is termed *small*.

Normal Pulse.

"Thread-like" is a term which is applied to a pulse when it is very small. In acute inflammation, or where there is a risk of hæmorrhage, the pulse has a peculiar "throb." These different characters of the pulse can only be learned by careful observation at the bed-side; but to know them is of great value to all who are in attendance upon the sick. In taking the pulse of a patient, the fore and middle fingers of the right hand should be made use of, and the number of beats counted by means of a watch having a seconds hand. The pulse of a healthy adult beats about seventy times in a minute. The pulse of a woman beats more rapidly than that of a man. During sleep the pulse beats less rapidly than when awake. Only the facts in connection with these various points ought to be reported, the interpretation of their meaning belongs to the medical man.

Other Observations of the Pulse.

Besides this observation of the pulse, there are many other things which should be noted and

reported to the physician at his visit. Thus, if a patient is suffering from a cough, the frequency of the paroxysms should be noted; the time of their occurrence, whether during the early part of the night or toward morning; their duration, whether a few minutes or half an hour; also the appearance of the patient during the continuance of the paroxysms. In whooping-cough the face becomes congested and of a purply hue during the paroxysm; while in consumption, it remains pale, and is bathed in perspiration.

Bowels.

As the evacuations from the bowels frequently afford much information in connection with a case, they should be preserved for inspection. It is also very necessary to preserve a quantity of the patient's urine, as this also often throws light upon a case. The physiognomy of disease is often spoken of, and, if carefully studied, may be of much value; those who are in attendance upon the sick should strive to make themselves familiar with its varied manifestations as these come under their observation.

Coughs.

The character of the cough should also be observed. In croup it is hard, barking, and has

a peculiar metallic ring about it; whereas in bronchitis it is softer. No less important is it to observe the appearance of what has been expectorated. Much valuable information is to be derived from a careful examination of the spittle, and the preservation of it for the physician's inspection should never be neglected. In pneumonia, or inflammation of the lungs, the spittle has a rusty appearance; in pleurisy it is frothy; in bronchitis it consists of viscid mucus, while in consumption it is streaked with blood.

Temperament.

There are also peculiarities of temperament, a correct knowledge of which on the part of nurse or attendant may save the patient much annoyance. As these differ in individual cases, a careful study of each is necessary to make one familiar with them; but where this has been done, much may be achieved in the way of avoiding those things which are known to be sources of irritation to a patient, and rendering his illness much more bearable than it would otherwise be. It is a well-known fact that many superstitions are the result of bad observation, and that bad observers are almost all superstitious; hence the necessity there is for the cultivation of correct habits of observation

on the part of those in attendance on the sick. Without this, serious changes in the patient's condition may be allowed to pass unnoticed, and much harm result in consequence.

Chart.

The work of the physician would be greatly augmented and facilitated if in every sick-room a chart were kept to record facts, especially such as have been indicated, in connection with each case. The more important to note, if such a method should be adopted, are those connected with the pulse, which ought to be recorded regularly night and morning; also the number of respirations, and any peculiarity that may be observed in connection with the breathing. Observations in connection with food and sleep are also most important.

Symptoms—For or Against.

During the progress of disease it is important that the nurse or attendant should be able to recognize those symptoms which denote recovery and those which denote the reverse; and yet there are few who are able to distinguish between the one and the other. After many fevers recovery is slow, and it may be long before the patient is able to stand on being taken out of

bed, and yet if his appetite returns, and he begins to take food with greater relish, he may be looked upon as progressing. Again, if a patient who was able to stand or sit up in bed is unable to do so any longer, although in other respects little alteration may be noticed in his condition, he is undoubtedly becoming weaker. These changes, especially in chronic cases, are frequently allowed to pass by unnoticed, and the end often comes unexpectedly, when more careful observation might have warned the friends of its approach.

Amount of Fever.

The amount of fever may be roughly estimated by means of the hand. True observations in regard to this can only be made by employing the thermometer; but as this requires skill for its proper application, it had better be left in the hands of the physician. If a record such as this were kept, the medical man would be able to see at a glance the condition of his patient during the time that had elapsed between each visit, and by the information thus obtained, added to the facts which he himself had observed, would be enabled to judge more definitely of the real progress of the case.

Important Part.

The value of adopting such a plan will be more apparent when it is considered what effect the doctor's visit frequently has. How often, for example, when his footstep is heard on the stair, does the patient become flushed and excited, and his pulse quicken; and unless the physician can remain until all excitement has passed away, how easily may he take away an erroneous impression with regard to the case! In order that the facts recorded by those who have care of the sick be of value, the observations must be made methodically and shown to the physician at each visit. With regard to this habit of careful observation too much cannot be said in its favor, and if it should entail some extra trouble upon those in attendance on the sick, the fact of so much incorrect and misleading information being daily supplied to the physician, shows the necessity there is for their adoption.

CHAPTER XII.

CONVALESCENCE.

THE period of active disease being at an end, the patient passes into that state which is called convalescence, during which the powers of nature are exerted towards repairing the waste of structure that has occurred during disease. Up to this time the efforts of nature have been directed towards enabling the body to combat successfully the disease that threatened to overwhelm it, and now that this has been achieved, and the combative part is over, her energies are called into play for another purpose. The frame that has been wasted by disease requires to be built up again, the worn-out frame requires to be supplied with fresh power to fit it for its accustomed duties, and the vital energy expended during disease requires to be restored.

Active Disease.

During the continuance of active disease there must always be more or less apprehension lest the issue should be a fatal one, and how welcome to the friends who have anxiously watched

by the bedside of the sick is it to be told by the physician that the fever is abated, and that pulse and temperature are again normal! With what joy do they listen to the welcome news; hope that had well-nigh become extinguished the while reanimating their breasts and filling their minds with bright pictures of the future; and yet what need is there for care, lest the dangerous hopes which convalescence brings with it should meet with disappointment!

Critical Time.

During convalescence the greatest care is necessary, as relapses may occur, and the disease end fatally, or it may assume a chronic form; hence the necessity there is, when active disease is over, of those who have the management of the sick attending in every particular to the rules laid down by the medical attendant, and avoiding everything that would be likely to exert a hurtful influence upon the patient's recovery.

Injudicious Friends.

It is now that the injudiciousness of friends begins to manifest itself, and unless firmness be exercised on the part of those in attendance, the patient may suffer through their mistaken

kindness. Hitherto a barrier has prohibited their entrance to the sick-room; but, this being removed, they now enter, and fresh dangers arise to the patient. In the case of children, especially, there arises the danger that sweetmeats and pastry-stuffs may be thus brought within their reach, and being eaten, a relapse may be caused. Both in hospitals and private homes this is constantly met with; and notwithstanding the vigilance which obtains in the former, patients receive from their friends, and consume stealthily, what in many instances does them a positive injury. There is at this time call for increased efforts to see that the patient is placed under the influence of those conditions which will operate most beneficially upon him, and be most helpful in recovery.

Return of Appetite.

One of the most frequent signs of returning health is the return of the patient's appetite. While the disease was at its height he had no desire for food, and perhaps only took it with an effort, but now that his appetite is returned, it seems as if his craving for food could scarcely be satisfied; and it is at this time, on the return of the patient's ability to eat, that the greatest caution requires to be exercised on the

part of attendants and friends. The patient's desire for food should never be fully satisfied. If attention is not paid to this the enfeebled stomach may have too much work thrown upon it suddenly, and being unable to accomplish the work thus given it to do, indigestion may result, and the patient in consequence suffer a relapse.

A Common Error.

A very common error is made by supposing that when the patient has become convalescent, the work of the attendants and friends is almost at an end; but how different in reality is the true condition of things! It is indeed true that the visits of the doctor are not now so frequent as they were; cases of more urgency may be demanding his attention; but on this account do not let it be supposed that the efforts of those who hitherto have had charge of the sick are to be relaxed. On the contrary, and just because the visits of the medical attendant are less frequent, more devolves upon the nurse and the friends; and whereas formerly they were able to receive daily instruction as to what they should do, they are now thrown much more upon themselves. For this reason, also, it becomes more necessary that careful ob-

servations should be made in regard to a case, otherwise the physician will be unable to form so correct an idea of the condition of the patient as he might. The instructions given at each visit should also be carefully attended to, and nothing be permitted to interfere with the carrying of them out.

Leaving the Bed.

The time which the patient must remain in bed varies in individual cases, and can only be satisfactorily determined by the medical attendant. It may be said, however, that during the febrile part of every disease the patient should be kept in bed. To keep a patient in bed too long exerts a weakening influence upon him, the bowels are apt to become sluggish, the appetite flags, and the respiration is less active than when he is up. In the case of children this can be more readily determined, and when they are observed moving about the bed instead of lying still after all feverishness has left them, it is an indication that they are in a fit state to leave bed.

Not to Remain Up Long.

When a patient gets out of bed for the first time after a severe illness he is generally only

allowed up for a short time, and the effect produced upon him should be carefully watched, as it will best show whether or not he is able to leave bed with impunity. Should the patient, instead of appearing better for his first short sit up, seem greatly fatigued, and instead of sleeping soundly appear restless and disturbed, he had better be allowed to remain in bed a few days longer, after which he should be again tried, the same precautions as formerly being taken and the effect once more closely watched. While care is taken to see that the patient does not remain up too long, care must also be taken that he is exposed to no draught. If on first leaving bed he is exposed to this influence he may suffer serious relapse, and his recovery be in consequence greatly impeded.

Patient's Clothes.

The clothing of the patient should also be attended to. It should be warm and comfortable. There is greater likelihood at this stage of mischief resulting from insufficient than from too much clothing, hence the necessity of seeing that the patient is well clothed.

Change of Air and Scenery.

Of all the agencies that operate beneficially and serve to restore the patient to health and strength

again, change of air is perhaps the most potent. The patient who has remained for weeks in very much the same state, getting neither better nor worse, will often wonderfully improve after a few days spent in the country or at the seaside. The inhaling of pure air, and the effect upon the mind of new scenery and fresh objects of interest, are marvellous. If the period of sickness has been passed in a room whose only view was the backs of houses or the fronts of those which formed the opposite side of the street, how great and invigorating must be the change! What an influence for good, after leaving such a scene, must the sight of green fields and mountains and rivers have upon the patient's mind! How many different channels are thus opened up to him into which his thoughts are involuntarily directed; and while his mind is thus busily occupied his bodily powers are speedily restored. No less beneficial is the change to the seaside. Here the fresh sea breeze exerts a wonderful power over the frame enfeebled by disease, and the languid bodily powers are speedily restored.

Reading or Talking too Much.

During convalescence, if the patient is at all intellectually inclined, much pleasure may be given him by reading to him or by supplying him with

literature of an interesting nature. If he is read *to* it must not cause fatigue to the patient by being overdone, and the manner of reading should be slow and deliberate. If he prefers reading himself he ought not to be allowed to pore incessantly over books, as harm may thus result. Very frequently at this time, also, the visits of friends, if unduly prolonged, prove hurtful; or if they engage the patient in too lengthy a conversation it may give rise to fatigue and exhaustion. These things should be always kept in mind and the patient guarded as far as possible from their prejudicial influence. Attention to such matters will be of great service in facilitating the patient's recovery, and will go far to prevent those relapses which are only too frequently met with from carelessness in these respects.

Negligence.

The amount of harm and permanent injury which frequently result from negligence during the period of convalescence are but little known. Many lives have, indeed, been sacrificed from carelessness and thoughtlessness at such times, and this fact ought to impress itself deeply upon the minds of those who are in attendance on the sick, and arouse them to a consciousness of the necessity there is during the whole period of

convalescence for increased, instead of diminished vigilance. A little more caution than is usually found, and the chances of relapse occurring would be greatly lessened, an otherwise precarious time rendered comparatively safe, and the patient's recovery be made more permanent and complete.

CHAPTER XIII.

HAVING SPECIAL REFERENCE TO CHILDREN.

ALTHOUGH the foregoing remarks have been made with special reference to adults, most of the subjects treated of are equally applicable, and the carrying out of their various details equally necessary, to the proper management of children during the time of sickness; so that to treat in this chapter of what has been already dealt with in the previous one, would merely be to repeat what had been there said at sufficient length. There are, however, certain peculiarities arising from the age, the growth, and the diseases to which childhood is specially liable, that call for a few remarks in addition to those which have already been made in connection with the sick-nursing of adults.

Strict Attention.

The necessity of strict attention being paid to the rules already laid down in connection with the important subject of ventilation need not be dwelt upon now. These rules must be adhered to in the case of children in all their stringency, and, if possible, more care taken to see that they are efficiently carried out; because, being unable to influence their surroundings, they are utterly at the mercy of those who have the making of them. Again, in regard to temperature, the greater susceptibility of children to the slightest variation renders it all the more necessary to attend carefully to this. Also in regard to the lighting of the apartment, the same scrupulous care must be exercised. From neglect of this, light may be allowed to stream in upon the child's face, and being unable to alter its position, the little sufferer has to submit to this, to say the least of it, unpleasant influence; or again, a lamp may be so placed that the child, turning towards the light, as it invariably does, has to twist and turn about in the most pitiful manner, when a little forethought on the part of those who had the placing of it would have been sufficient to obviate any such occurrence.

CHAPTER XIV.

INCAUTIOUS USE OF MEDICINES.

DURING the early years of childhood the incautious use of medicines by those who are ignorant of their properties, is a fertile source of danger. To some, indeed, the effect may be speedy and fatal; in others, impairment of body and mind may be the result, and the child grow up weakly and delicate, and bearing the marks of this injurious practice upon it to its dying day. Too much stress cannot be laid upon the necessity there is for parents abstaining from this pernicious habit of dosing their children with medicines. Were the drugs thus freely employed harmless in their nature no great mischief might result; but, unfortunately, there are impostors in every city ready to take advantage of ignorance, and the number of those who believe in, and are, in consequence, led astray by them, is truly marvellous.

Quack Medicines.

The daily papers are full of their advertisements, our streets are crowded with their placards, they themselves gather together assemblies of the simple, who, after hearing of the wonder-

ful cures which have been wrought by the vaunted remedy, purchase it, and taking it home with them, administer it to their helpless babes. Would that people were aware of the evil that is done daily by such means, and that they knew the consequences of their folly upon their little ones. Frequently, by the administration of such drugs, which generally contain some preparation of opium, a dreamy, somnolent state is induced, from which the child may never recover.

Unnecessary Drugging.

There is another prejudicial habit which parents frequently have of giving their children purgative medicines with a view to "cool their blood," as it is called. This is generally resorted to in spring and autumn, and is frequently made use of altogether as a precautionary measure, there being people who imagine that medicine taken in health acts as a sort of reserve fund in time of disease. With a little extra care in dieting at such seasons of the year, and the substitution of one article of food for another, much of this unnecessary drugging might be avoided.

Valuable Time.

A the beginning of every illness of childhood if parents would have recourse to the employ-

ment of simple hygienic precautions instead of flying at once to drugs and using them to the injury and hurt of their children, the simpler ailments would be more easily got rid of, and if anything more serious were the matter with the child, less precious time would be wasted than at present. It is really sad to think how much evil results by thus dallying with disease, how many valuable opportunities are allowed to slip, and how many fatal results are the direct consequence. The parent, with her medicine chest employs first one drug, then another, being perhaps all the while perfectly ignorant of the complaint from which the child is suffering, and frequently giving it those things which instead of doing good are the means of doing positive harm. Thus days are wasted, and valuable time is lost, the disease meanwhile making rapid progress; and when the child has almost succumbed to it the assistance of the physician is sought. Surely conduct such as this ought not to occur.

Unprofessional Service.

It seems indeed extraordinary that the diseases affecting the human frame should be thus tampered with, and that any kind of hand should be thought sufficiently skilled to adjust its complex machinery when anything has gone wrong. While

we would not trust the mending of our watch to a blacksmith, nor think of sending for a plumber when we had broken the leg of a chair, this same human body, with all its complexity and with all its extreme delicacy of structure, is daily submitted, in the treatment of those ills to which it is heir, to those who are altogether ignorant of its structure and unable to treat its diseases.

Illustration.

The following case is not imaginary. A child is noticed by its parents to be restless and irritable; its sleep is disturbed, and its appetite becomes impaired. The cause of these symptoms may be variously interpreted; generally the child is supposed to be suffering from worms, wind, or, if young enough, teething is looked upon as the cause. The opinion of the neighbors is then sought, and after consultation the disease from which the child is suffering is agreed upon, and a course of treatment adopted.

Teething.

If the symptoms have been referred to teething, some well-known teething powder or soothing syrup is recommended, and the child is subjected to its influence; but as most of these powders and syrups owe their efficacy to the presence of

some preparation of opium—a drug most pernicious to children—the harm resulting from their administration is great. Were parents only aware at what cost to their helpless infants their cries had been stopped and their restlessness put to an end, they would surely be less reckless in adopting such treatment; and when a sucking-child has been known to die from the effect of a single drop of laudanum, it shows the necessity there is for the exercise of the utmost caution in the administration of opium in any form to infants and children.

Is it Worms?

When worms are supposed to be the cause, tablets and powders of various kinds are suggested, which are likewise given unhesitatingly to the child. If vermifuge remedies are given whose composition is known and which are simple in their nature, no great harm may result, but the indiscriminate employment of wormcakes and tablets as sold in the shops cannot be too strongly condemned. Numerous diseases of childhood are attributed to the influence of worms; and while undoubtedly their presence may lead to great disturbance of the system, and be the starting-point of serious mischief, there are cases in which their presence gives rise to no serious symp-

toms at all. When they are present in a child the diet should be regulated so as to prevent as far as possible their occurrence, and proper means employed, under the physician's direction, for their removal. Parents are, however, too apt to attribute to the influence of worms an altogether exaggerated part in the production of the diseases of childhood, and many children are subjected to courses of vermifuge medicines when the diseases from which they are suffering are not in the least dependent upon the presence of these parasites.

Is it Wind?

Wind also is magnified into great importance, and looked upon as the *cause* of many of the ailments of childhood, and instead of the condition which has given rise to the presence of flatulence being sought out, the easier though much less certain method of treating the wind is had recourse to. Strange indeed are the powers with which wind is vested in the popular mind: in the strangest and most unaccountable manner it shifts about from place to place, now appearing between the skin and the flesh in one place, now giving rise to pain in another, and yet in a third even causing convulsions. It ought to be distinctly understood that flatulence is an *effect*, not a *cause*, and that to treat

it satisfactorily the more laborious work of discovering what that cause is, and treating it, must be had recourse to.

An Erroneous Practice.

There is a practice widely prevalent in this country, of parents going to drug stores and asking the druggist to prescribe for a child he has not seen. Generally the druggist gives only such simple remedies as are not likely to do much harm if they are the means of doing no good, but in this way much valuable time may be lost, and if the disease is serious it may have made rapid progress before the physician is called in. We would again inculcate the necessity, when a child is seen to be ailing, of the employment of ordinary hygienic precautions, and if the child is merely suffering from temporary indisposition, the adoption of such measures will generally be sufficient to remove it; whereas if anything more serious should be hanging about the child, which fails to be removed by these means, no time should be lost in sending for the physician. Delay in such cases may prove dangerous, and the benefit of early advice and early treatment skilfully conducted cannot be overestimated.

Reckless Employment of Physicians' Prescriptions.

There is one other subject in this connection about which a few words may be said, and that is the reckless employment of physicians' prescriptions. Instances such as the following are of frequent occurrence. A lady has consulted a physician who, after careful investigation of her case, prescribes for her, but along with her medical treatment, he lays down certain rules as to diet, exercise, baths, and other hygienic precautions which he deems necessary to the proper management of the case, and without which the medicine would be of little avail. In all probability the patient has been neglectful of these measures, and their adoption, with the necessary giving up of a bad system, has of itself an influence upon the patient beneficial in the highest degree. On good resulting, and a cure being ultimately established, the effect is attributed entirely to the influence of the drug, the hygienic measures adopted being altogether ignored in the result that has been attained. Of course the prescription is greatly thought of, and is carefully put away. Some time after, a letter is received from a friend in the country who has been suffering for some time and been

feeling very unwell. A long description of her ailment is given, and the symptoms having much in common with those which she had, the two diseases are considered identical, and without a single word about diet, exercise, or anything of a hygienic nature, on the adoption of which her medical adviser was most particular, she sends the prescription to her friend. The prescription is received and made up at the druggist's, and taken according to instruction. It may be that benefit is derived from it; but the probabilities are greatly in favor of no good resulting, and after valuable time has been thus wasted, and disease tampered with, the physician is called in and shown the prescription, which he pronounces as unsuitable in the present case.

Such Practice Dangerous.

Such a practice as this, leading to waste of time, with its consequent risk of life, ought surely to cease. The number of failures in such cases is never known, but should the remedy succeed, its wonderful virtues are extolled and its powers greatly magnified. Now, should the drug so employed be comparatively safe, no great harm may result; but as frequently physician's prescriptions contain drugs of a poisonous nature, which require to be given cautiously, and their

effect upon the constitution carefully watched, the result might at any time be most serious.

Another Practice.

There is another practice which is injurious in its effects, but one which widely obtains, especially among the upper classes of society, namely, that of giving medicines to the poor. This practice is one that is pernicious, and ought to be condemned. If instead of giving drugs to the poor they would teach them the value of pure air, proper dieting, exercise, cleanliness, etc., they would be bestowing a much greater blessing upon them.

CHAPTER XV.

SIGNS OF DISEASE IN CHILDREN.

TO be able to distinguish disease in a child, from some mere transitory ailment, forms a most important part of the work of those who have the care and upbringing of children entrusted to them. To be sending for the physician when there is nothing the matter with the child, and refrain from so doing when the child is seriously ill, are mistakes which are at present of daily occurrence. Better far, however, that the former should take place, than that a grave disease should be neglected and the patient suffer in consequence.

Observe the Difference.

There are, fortunately, marks by which the observant mind may be able, in most cases, to distinguish between the one and the other, but when there is any doubt existing in the mind we would urge the necessity of calling in the aid of the physician. By so doing all unnecessary delay is avoided, and if the disease is serious, it will be all the better for the patient that it has been taken in time.

Signs of Serious Disease.

When any serious disease is impending in a child, it is generally noticed to be out of sorts for some time; he is observed to be restless and irritable; his sleep becomes disturbed; he may awake up with a scream; occasional muscular twitchings may also be observed. The child becomes dull and listless; he has no inclination to join with his brothers and sisters in their sports; he will remain motionless for a long time, only following them in their amusements with his eyes; his features are those of an aged person. The appetite also becomes capricious, or may be altogether lost. When these symptoms are observed coming gradually upon a child no time should be lost in seeking advice, as in all probablity something of a serious nature is impending.

Other Symptoms.

Besides the foregoing symptoms, there are others which shall be noticed more in detail hereafter, the presence of which give valuable information, not only as to the fact of impending serious disease, but also with regard to the part of the body affected. Now, the importance of information of this kind in the case of children

who are able to express their feelings to those round about them only very imperfectly, if at all, must be apparent to everyone. The expression of the countenance, the voice, the movements, are all carefully studied by the physician, and employed by him in diagnosing the diseases of infancy and childhood, and to the unskilled a knowledge of some of these under the modifying influence of disease may prove useful. We shall consider those signs of disease which may be derived from—

The Condition of the Body.

If a child that has been plump and well begins to lose flesh, and is noticed day by day to become more wasted, in all probability there is something serious threatening the child. The production of emaciation is associated in the popular mind with various affections; thus, worms, teething, diarrhœa, and growth, are all supposed to give rise to emaciation. With regard to the first, although udoubtedly a cause of emaciation sometimes, when present in large numbers, they certainly do not give rise to it with anything like the frequency with which they are credited. Should worms, however, be observed in the motions, means should be employed to get rid of them as soon as possible. Another frequently

supposed cause of emaciation in children is teething, but this can only be attributed as a cause when its existence is evident, and when, instead of going on naturally, it is accomplished irregularly, and in a tumultuous manner. Brain diseases, as is well-known to the physician, generally manifest themselves by emaciation; and unless this fact is borne in mind the coming on of a serious disease may be overlooked, and much valuable time be lost in consequence. Another cause of emaciation is jealousy on the part of the child. Anthing that might lead to this developing itself in one member of a family towards another should be carefully guarded against by those who are entrusted with their upbringing.

Altered Demeanor.

When a child that was bright and happy is observed to become listless and morose, careless in regard to everything that formerly gave it happiness, unwilling to join its brothers and sisters in their play, and sitting silently watching them in a half-interested sort of way, depend upon it there is something seriously wrong. A child, when in health, is bright and active, seldom at rest for any length of time, unless when asleep; and when this natural activity,

which is a sure sign of health, ceases, the cause should be at once inquired into, and should the parent be unable to give herself a satisfactory explanation, no time should be wasted in sending for advice. It has been remarked that a child indisposed is a grumbling child; that one suffering from disease is dejected. There is much truth in this, and indeed it has deep root in the popular mind; for it is always looked upon as a favorable sign when a child that has been passing through a serious illness begins to grumble and be dissatisfied with its surroundings. The child that is really ill is dull and morose; he is seldom heard grumbling about and raging at everything; he takes little notice of what is going on round about him, and has quite an aged and almost ludicrously serious expression of countenance. Who is there that does not rejoice in the boisterous mirth of children, and bemoan its absence when it is not there? Where health is there is activity—ceaseless, restless motion; when disease is impending activity ceases, and languor and depression come in its stead. It is well that parents should be familiar with these manifestations of disease, and with some of those more apparent signs which indicate departure from a state of health. Much

time may thus be saved that would otherwise be frittered away; and disease, by being combated early, would be much more easily dealt with.

The Cry.

From the cry of a child much valuable information may be derived. By observation, both parents and physicians are able at once to perceive the difference between the cry of hunger and that of pain. The cry of a child in pain is peculiarly sharp and sudden, while that of a hungry child is generally preceded by a series of grunts, and is accompanied by a turning of the head from side to side, and by certain movements of the mouth, as if searching for the breast.

Pain.

When a child is suffering from pain in any part of the body, the pain is accompanied by certain external manifestations which not only render its existence apparent, but which point to the locality from which it arises; thus pain in the abdomen causes a child alternately to draw up its legs and straighten them again, the fists remaining meanwhile clenched. The features become more or less contracted, and the child cries while the pain lasts; so that if the pain is spas-

modic in its nature there will be periods of crying, followed by intervals of complete rest. When the child is suffering from inflammation of the lungs, it cries at the time of coughing, and for some little time after. When the child is suffering from pleurisy every effort at coughing gives rise to pain. When a child is suffering from brain disease the cry is very significant, it takes the character of a sudden shriek. In general uneasinesss the cry is of an irritable nature, and ceases when soothing treatment has been adopted.

Position.

The attitudes assumed by the child should be carefully observed. Does it lie on one side in preference to the other; is the hand frequently uplifted towards the head; does it burrow in the pillow, etc. The ascertaining of these various points should be carefully attended to, as they are of much service in throwing light upon the case.

Appearance of Face.

The appearance of the face is often expressive of the diseases of childhood, and different parts of the face are affected according to the seat of the disease. Thus, if the brain is the seat of disease, the forehead and eyes are noticed to be

principally affected; the former is contracted, the eyebrows are knit, and light cannot be borne by the latter. In diseases affecting the chest, the parts of the face chiefly altered are the nose and cheeks. The nostrils are seen to dilate with each inspiration, and the cheeks are flushed. When the stomach and bowels are affected there is a peculiar pallor and contraction about the face.

Feverishness.

There are symptoms which manifest themselves in children from time to time, the signification of which may be very grave and indicative of serious disease, or which may be trivial and passing in their nature, and of no importance. Thus a child may suddenly become feverish, the temperature may be raised, the pulse quickened, the skin become hot and burning, and the face flushed, and yet, after a lapse of a few hours, the child may be perfectly well. Some children are much more liable to such attacks than others, and they frequently are the cause of much unnecessary alarm. If the child has been in its usual health up to this time, if it has not been restless, irritable, listless, or morose, if its appetite has remained good and its sleep been undisturbed, the fever will generally pass off in

a few hours. If, however, it should persist, treatment had better be adopted without further delay, as fever of a serious nature may be impending. Many children suffer from this kind of feverishness from fright, from errors in diet, and from other like causes. In all cases in which the feverishness is of longer duration than a few hours, medical assistance should be sought, as one of the eruptive or continued fevers may be impending.

Symptoms in General.

Should there be along with the feverishness the symptoms of an ordinary cold in the head, such as running at the nose and eyes, sneezing, dry, hacking cough, hoarseness, great heat of skin, in all probability an attack of *measles* is impending. If there is chilliness and lassitude with pain in the head and soreness of the throat *preceding* the fever, and a pulse that is very frequent, there is cause to dread the approach of *scarlet fever*. If there is shivering, high fever, headache, vomiting, and especially severe muscular pains referred to the back, and if there is the absence of throat and head symptoms characteristic of scarlet fever and measles respectively, there is strong reason to suspect *small-pox*. Additional assistance may be obtained in forming

a correct opinion with regard to any individual case by a knowledge of the existence of small-pox in the neighborhood. When there is little or no constitutional disturbance, and a rash beginning on the shoulders and back, and consisting of rose-colored pimples which become converted into transparent vesicles, the disease is *chicken-pox*. It is well whenever any one of these diseases is suspected to call in the aid of the physician, because, although the attack may be mild, the after consequences are frequently serious, and if neglected may lead to permanent mischief or to a fatal result. Thus, after measles, inflammation of the lungs, bronchitis or croup may supervene, unless sufficient care has been exercised after the departure of the fever to guard against the cold. Also after scarlet fever kidney affections are apt to arise unless care is taken to prevent exposure. The fact of such complications being liable to occur in the mildest cases should prevent them being treated lightly, and in regard to these, as well as the graver forms, the utmost caution is necessary till all risk is over. There are other fevers, called continued fevers, such as *typhoid*, which are ushered in by long-continued disorders of the digestive and nervous systems which cannot fail to attract

attention; and when observed, early assistance should be obtained, as long and careful management are necessary in such cases.

Cough.

Cough in children may be a symptom of serious or trivial import according to the cause from which it has arisen; thus it may proceed from worms, teething, bronchitis, pneumonia, or may arise in connection with ordinary catarrh; but whatever the cause, it ought not to be looked on slightingly, nor to be allowed to go on unchecked.

Whooping Cough.

This affection of the nervous system is regarded popularly with very little gravity, but the number of deaths annually recorded as caused by this disease shows it to be much more fatal than generally believed, and to be a disease requiring careful medical treatment. Moreover, there are many grave complications that may arise in connection with it, such as bronchitis, inflammation of the lungs, convulsions, and disorders of the bowels; and so, although the disease, if mild, may run a favorable course, scarcely requiring any medical treatment whatever, still the fact that these complications may

at any time arise, unless sufficient care be taken, should make parents careful not to treat this disease slightingly. Again, there is a liability, if the disease has been allowed to run its course, of a habit of coughing being established, which may only be got rid of with great difficulty. A case is recorded by Dr. Anthony Thompson in which a child who had suffered from whooping-cough retained the cough for a long time after, and was ultimately cured by threatening to put on his chest a blister one foot square unless the cough ceased. The blister was made, and being placed where the child could see it, had the desired effect of putting an end to the cough.

Croup.

This disease, which is most frequently met with in cold and changeable climates like our own, and which is most prevalent during the spring and winter months, is one the mention of which sends a thrill through every parent's heart. The peculiar brassy cough usually heard for the first time in the stillness of the night naturally causes great alarm, but as this cough may be due to *false* croup, an affection which has nothing of the deadliness about it so characteristic of the other, a few words shall be added in regard

to both, which may enable the parent to distinguish between the two, and so relieve the mind of much anxiety.

True and False Croup.

True croup is generally ushered in by fever, irritable temper, and those symptoms which are characteristic of an ordinary cold, such as hoarseness, suffusion of the eyes, and running at the nose. *False* croup, on the other hand, usually occurs without any warning, and when the child appears in the enjoyment of excellent health. The child is frequently seized during the night, and the attack may be so slight that after two or three crowing inspirations it may fall asleep; or instead of appearing thus mildly it may be more severe, and the child may then struggle for breath and seem almost suffocated, when, the spasm ceasing, air is again drawn into the lungs with a crowing inspiration, and the paroxyism is over. Whenever there is any doubt in a parent's mind as to the nature of the cough from which the child is suffering, it is always well to send for medical assistance; if it be nothing serious, anxiety is relieved, and if serious, all reflection will be obviated by so doing.

Other Affections.

There are several other affections, such as *vomiting* and *diarhœa*, which may be significant only of disorders of the digestive system, or which may be more serious in their nature. Thus, vomiting is frequent at the commencement of many diseases, and unless there has been anything at fault in the way of errors in diet to account for it, it should not be treated lightly. Generally a parent will be able to distinguish between the simple and that which is of more serious import. Should the vomiting, however caused, be persistent, it must on no account be allowed to go on unchecked. Diarrhœa, especially in children who are teething, is frequently neglected till very considerable emaciation has occurred. This cannot be too strongly condemned, as the mortality from this cause in children is very great. If the diarrhœa does not yield in a day or two to careful dieting, no further delay should occur in sending for medical assistance. Should the case then be judged one merely of indisposition the means to be adopted are rest, regulation of temperature, and careful dieting.

Ailments of Childhood.

Many of the ailments of childhood would be easily got rid of by the employment of such

means, and if they persisted, and skilled advice was required, the physician would find that the course that had been adopted had already prepared the way for such medicinal treatment as he might think necessary. In his book, called the "Mother's Work with Sick Children," Professor Fonssagrives urges the necessity of every mother keeping a sort of sanitary record-book for each of her children, in which she might enter, in a methodical manner, a few notes from time to time, having reference to the natural processes of growth and teething, how they have been accomplished, and the diseases which each of them has passed through. He shows the value of this in after life to physician and patient alike, and the good that would be likely to result from it. Of course were such a plan adopted by any parent it would require to be systematically gone about and regularly attended to, to be of any practical value when the child had attained to maturer years. This habit of carefully recording a few facts from time to time would also lead to habits of closer observation on the part of the mother; and as the time that would be occupied in so doing would be infinitesimal when extended over a number of years, the want of this cannot be urged as an excuse.

Plan.

The plan recommended is simple and natural, and for the sake of those who may wish to adopt it a translation is here appended:

1. Date of birth.
2. The mode of lactation and the particular circumstances which influenced it.
3. The diseases of lactation with their dates, their duration, some indications of their severity, and the measures successfully employed against them.
4. The first dentition. The time of appearance of incisors, of the eye teeth, of the first large teeth; the various incidents of dentition (convulsions, diarrhœa, different ophthalmic affections); the date of the appearance of the twentieth tooth.
5. The date of weaning; the ease with which it was accomplished, or the incidents with which it was complicated (diarrhœa, loss of flesh, marasmus).
6. Walking.—At what age did it become possible? Was it advanced, retarded, or interrupted?
7. Vaccination.—At what age and under what circumstances? Were the pocks regular in their progress?

8. The intermediary dentition, or eruption of the first four molars. The concomitant incidents.
9. The second (or seventh year) dentition. The peculiarities which it presented.
10. The eruptive fevers (measles, scarlet fever, chicken-pox, etc.).
11. Growth.—Measure every three months, and note the manner in which it is done. Precocious, tardy, or irregular growth. Incidents connected with growth.
12. Incidental diseases, ordinary attacks of indisposition, etc., etc.

A plan such as the foregoing, if carefully and regularly executed, could not fail to be of use in the treatment of the diseases of adults, and the light thus thrown upon the previous history of the individual would be of the most valuable kind. Of course, in any such system of note-taking, only facts should be recorded, and these expressed as briefly as is consistent with thoroughness in their execution.

A Mother's Work in Sick-Room.

A mother's work in sick-nursing may extend to observations in regard to pulse, respiration, cough, etc., and many of the facts which she is able to supply may greatly assist in supplementing the work of the physician. The respirations should

be counted by the hand being placed upon the chest, or by means of the ear, and any peculiarity noticed about the breathing should be recorded. Thus it should be noted whether the breathing is harsh or soft, and whether or not there are any accompaniments such as wheezing, etc. The number of pulse beats may be counted by placing the fore and middle fingers upon the artery at the wrist on the thumb side, or by counting the pulsations in the artery of the temple or neck. Any irregularity in connection with the pulse should also be noted. In regard to whooping-cough an account should be kept of the number of kinks which the child has in the day.

For further information regarding the nursing of children—especially infants—we refer you to Part II. of this work, which is a special treatise on infancy, and takes the child from birth through the most critical period of its life.

CHAPTER XVI.

MISCELLANEOUS NOTES.

THE remarks which have already been made in the section having special reference to adults, with regard to ventilation, warming, cleanliness, etc., are applicable here in all their force. The child's sick-room, as much as that of the adult, requires to be thoroughly ventilated; the temperature requires to be kept of great uniformity, and only the most perfect order and cleanliness should prevail. Any deviation from those ordinary hygienic rules, so essential to the successful treatment of disease in the adult, cannot fail of being hurtful in the case of children. Indeed in their case our precautionary measures should be increased, and the carrying out of them insisted upon with greater vigor.

Perfect Hygienic Conditions.

The best means for securing the most perfect hygienic conditions in the sick-room, and so putting the patient under the influence of those circumstances most calculated to facilitate recovery, are those which admit of two rooms being used. These chambers should communicate with

one another, and the twenty-four hours be divided between them, the day being passed in the one and the night in the other. In the case of adults some difficulty might be incurred in removing the patient from one bed to the other, but in the case of children no such difficulty can arise, for, with a blanket wrapped around it, the child can be carried in anyone's arms with the utmost ease and without any risk of exposure from the room in which the day has been spent to the one in which the night is to be passed. A plan such as this admits of the most perfect ventilation being carried out in both apartments, and the change is one which is most grateful to the child. The temperature of the night-room must be carefully regulated, being always raised to the same degree as that of the day-room, before removal takes place. In this way all chance of the patient suffering chill is obviated. The fear of air, especially in diseases affecting the lungs, is frequently so great that children are allowed to inhale the same air over and over again rather than allow a supply of fresh air to come in at the window. This dread of harm resulting from the admission of pure air into the sick-room is, it need hardly be said, altogether unfounded, provided it be properly

attended to. Air must not be admitted into the sick-room so as to cause currents or give rise to draughts, and when these conditions are complied with, and the temperature of the room properly regulated by means of the fire, and kept as uniform as possible, no harm can attach to the admission of air by the window. On the contrary, to the patient who is suffering from disease, no matter of what nature it is, a good supply of fresh air is always beneficial, and is a powerful aid towards recovery.

Disinfectants.

Frequently when a sick-chamber is improperly ventilated, and the sense of smell begins to be offended by the impurities that load the atmosphere, recourse is had to the employment of various disinfectants, by the diligent use of which the air of the sick room is supposed to undergo sufficient purification to render it fit for breathing. No greater mistake than this could well be made, and the feeling of security to which a belief like this gives rise is one which cannot fail to operate injuriously upon a patient. Let it not be imagined that any amount of disinfection, however perfect in itself, can purify the air and render it fit for the purpose of respiration. It may, indeed, so alter it that the sense of

smell shall not be offended, but the mischief is still there, the air is yet impure. The organic impurities with which the atmosphere is laden may be rendered inoffensive, but the supply of oxygen is not in this way increased, and without this life-sustaining ingredient being present in due proportion no human being can long survive. When it is deficient, plants and animals alike suffer, and no amount of destruction of organic impurity can replace its want. Disinfection in its own place is very well, and should undoubtedly play a part in the hygienic management of the sick-room; but the part it has to play, important as it is, cannot supplant the necessity that is constantly arising for an efficient supply of pure air.

The Chief Disinfectants.

In speaking of disinfectants, we shall notice here only a few of the more important, and those which are in most frequent demand, such as *chloride of lime* and *carbolic acid*. Chloride of lime, by virtue of the chlorine which it contains, is at once one of the most powerful and one of the most frequently employed of disinfectants. The chlorine which is liberated from it on exposure to the atmosphere acts upon any infectious or deleterious mat-

ter that may be in an apartment, causing its destruction. The manner of its action is as follows: The gaseous compounds which are given off from putrifying matter have their hydrogen abstracted by the chlorine, and in so doing destruction of the organic substance results. The best way to use chloride of lime is to place a layer in a plate, and expose it to the influence of the atmosphere. The carbonic acid of the air will liberate the chlorine sufficiently quickly to keep down infection; but should it be desired to cause a more rapid liberation of chlorine, a little vinegar sprinkled over the chloride of lime will suffice. Carbolic acid is an exceedingly good disinfectant, concealing all odors that may be about an apartment; and a solution of this should be kept in the sick-room and used for disinfecting discharges, etc. Some of the solution should also be kept in the chamber utensils, and these, on being used, should be carefully disinfected before being again brought into the sick-room. Many other disinfectants might be noticed, such as animal and vegetable charcoal, chloride of zinc, sesquichloride of iron, etc.; but those already mentioned being more familiarly known, may serve to show the purposes for which this class of substances is employed.

Parasites.

We must, however, again repeat that the most perfect system of disinfection can never replace the necessity for a free supply of oxygen in the sick-room; and this can only be obtained by attending to the thorough ventilation of the apartment. In those houses where uncleanliness prevails, and in which the laws of health are either altogether unknown or their teaching disregarded, another class of enemies is to be found destroying the comfort and adding to the misery of many a little sufferer, namely, the class called parasites. Only the maintenance of scrupulous *personal* cleanliness can combat successfully the inroads of these creatures; but where that is found their appearance will be prevented, or if they are already present, their disappearance will be more certainly guaranteed than by the employment of the most perfect insecticides.

More About Light.

A few words are necessary here by way of supplementing what has been already said on the subject of *light*. In the case of children, it is necessary that the curtains employed for the purpose of darkening the room should be free from all figures, as these may give rise to hallucinations and cause

the child much unnecessary terror. A green blind will prove a grateful shade, and if devoid of figures, will answer perhaps better than any other. Care must be taken in the placing of a lamp or light of any kind to choose such a situation in the room that if any shadows are caused they shall be so obscured as to exert no prejudicial influence upon the child's mind. Unless this is attended to, the child may be greatly terrified. Especially is this the case when the shadows are caused by those who are in the room, and are in consequence always in a state of change.

Soap and Water.

The remarks already made in connection with the subject of *cleanliness* are applicable here in all their force. Popular prejudice, which is strongly in favor of abolishing all, or almost all, the cleansing the body in the time of disease, must be combated, and the fact of the necessity of employing soap and water during the continuance of disease, at any rate as freely as in a state of health, must never be lost sight of. Where the ordinary rules of cleanliness are ignored in the time of health, they are generally found to be so also in the time of disease, and thus an item of the utmost importance to the speedy and successful treatment of any case is found to be altogether wanting. With

many, the employment of a warm bath in disease is looked upon as a very serious matter indeed, and by some the mention of it is associated with the speedy decease of the child.

Pulmonary Diseases.

In pulmonary diseases especially, there is a great dread of the employment of a warm bath, lest the patient should be the worse for it; but, if proper care be taken, there need be no ground for apprehension. In the diseases of childhood warm baths are invaluable, and their employment are frequently followed by the most salutary results. In a child that is feverish and restless, marked dimunition of the febrile symptoms results, and the little sufferer that had tossed about unable to obtain rest, on coming out of the bath falls into a gentle sleep, and awakes with marked diminution of all his symptoms, and often is perfectly well.

CHAPTER XVII.

BATHS.

THE employment of baths as a means of preserving health and warding off disease has been hitherto greatly neglected, among the poor chiefly, and to a less extent among other classes. While their value in regard to both is undoubted, there exists a strange reluctance to employ them for either. In people, also, who have suffered from bronchitis and other chest affections, a great means of security against cold, and consequently against future attacks of their malady, will be found in the daily employment of a cold or tepid sponge-bath. It exerts a most beneficial influence upon the body; it acts as a general tonic to those of delicate constitution; the functions of the skin are stimulated; nervous energy is rendered more vigorous, and the frequently heightened functional activity of the nervous system is diminished; the balance of the circulation throughout the body is better maintained, owing to the free and unembarrassed action of the skin, and the appetite and digestion are likewise improved. Many who were formerly afraid to go out of doors if the weather seemed

cold and stormy, or if it happened to be damp and wet, are enabled, on making use of a morning bath, to do so with freedom and impunity. The general tone of their system is raised, and when the wind blows upon them they do not feel chilled now as they did formerly, but are now able to resist the action of the cold in a way they could not do before. This prophylactic influence of baths cannot be over-estimated, and the effect which they exert both physically and morally is very great; for besides influencing the body for good, they exert a powerful influence upon the mind as well, and in the case of children and young people especially this mental effect is of very great importance. As there are many kinds of baths used medicinally, we shall only notice those which are most important and most frequently employed.

Sponge-Bath.

In diseases accompanied by fever, in which the skin remains hot and dry to the feel, sponging is made use of; and as it is sometimes entrusted to those in charge of the sick, for its performance, a few words may be added as to the manner in which this is done. The manner in which it is accomplished is as follows: Remove the patient from bed, and having undressed

him, pass several large sponges rapidly over his body, until the whole of it has been sponged, after which the patient is to be dried and placed in bed. The object for which this bath is employed is to reduce the heat of the surface by means of evaporation, to cause the skin to act well and render perspiration more perfect, to reduce the irritability of the nervous system, and promote sleep. This sponging must not be undertaken unless by the advice of the medical attendant. Sponging of the chest and trunk is most valuable in those who have a tendency to asthma or other chest affections, in infants during teething, and in those who are rather delicate. It may be performed while the patient is in bed, and brisk friction should be afterwards employed so as to cause a glow upon the surface.

Salt or Vinegar Baths.

When salt and water or vinegar and water are used instead, the friction need not be had recourse to, as we wish merely to remove the water, which can be accomplished by soaking it up with a soft towel. The proportion of either salt or vinegar to be employed should be about four tablespoonfuls to every quart of water. These spongings should be used just before the

patient leaves bed in the morning, and may be employed during winter as well as during summer. In conjunction with open air exercise and proper attention to diet, this proves a valuable remedy.

Cold-Affusion.

This has been employed to reduce the temperature in cases of typhus fever, and for this purpose it is a powerful agent. It must, however, on no account be made use of without the sanction of the medical attendant. In its action it is more sudden and more decisive than sponging or the application of lotions.

When ordered, the doctor should always be on hand for the first bath, at least, to see the after-effect. If, however, he has gone, leaving orders that it be given, there are certain conditions under which it would be wise to postpone it until further instructions have been given. For instance, if, since the doctor left, a free perspiration has appeared; if the patient feels chilly, although his temperature is high; or, if on being raised up he should faint. Any other unlooked for symptom which shows itself after the doctor has gone, justifies the nurse in asking the doctor's advice before going on with the affusion. If nothing occurs to prohibit, it should be given as follows:

The patient having been stripped, is placed naked on a stool in an empty bath or tub, and three or four buckets of cold water, at a temperature of about 40° Fahrenheit, are then to be poured over his head and chest from a height of two feet or more. The greater the height from which the water is poured, the more powerful is its action. The patient having been dried, is again placed in bed. Cold-affusion is made use of when the temperature of the body remains permanently above the normal. In its action as a reducer of temperature it is more sudden and more certain than sponging, but requires to be used more cautiously. It is also used where there is great stupor. Its employment is contra-indicated, although the temperature be high, in those cases in which the patient feels chilly or in which the skin is covered with perspiration. Also, if the patient be a woman, and the monthly discharge present, it must not be employed. Being a powerful remedy, cold-affusion cannot be repeated more frequently than once in twenty-four hours. The best time for using it is at night.

Shower-Bath.

This bath partakes of the nature of cold-affusion, only it is not so severe. It may be employed either cold or tepid, the former acting more powerfully and having a greater stimulating effect than the

latter; but for those who are of a rather delicate habit of body the tepid shower-bath will answer best. The best time for taking this kind of bath is immediately on getting out of bed in the morning. Should the patient, however, not be able to stand the shock then, it should be postponed till an hour after breakfast, when the body will be better able to bear the shock and produce that state of reaction on which the utility of this kind of bath depends. Reaction after the employment of the shower-bath is greatly accelerated by friction with horsehair or coarse flannel gloves previous to taking the bath. The friction should be kept up till the body feels comfortably warm. We shall now notice those baths which are employed when it is wished to act upon special parts of the body, and which have received the name of *partial* baths. They are the *hip-bath*, the *foot-bath*, and the *hot* and *cold douche*.

Hip-Bath.

When it is wished to act upon those organs which are contained in the pelvis, the hip-bath is made use of. In order that the patient may be able to sit in the bath with comfort it should be provided with a back. These baths are generally used hot or cold, according to the effect that is wished to be produced, and the quantity of water em-

ployed should fill little more than one-third of the bath, as it might otherwise overflow on the patient sitting down. When this bath is made use of for the purpose of relieving pain, the temperature of the water should not exceed 90° Fahrenheit, and the patient may remain in it for half an hour, but when used to increase the activity of the womb when the monthly discharge is defective, it should be employed as hot as the patient can bear it, but the time during which the patient should be in the bath ought not to exceed ten minutes or a quarter of an hour. The best time to employ this bath is in the evening just before the patient retires to rest.

Foot-Bath.

When the face is full and flushed and the head feels congested, and apoplexy is threatened, or where apoplexy has already occurred and a derivative action is wished to be brought about, the foot-bath is generally had recourse to. It acts by causing an increased flow of blood to a part remote from the seat of injury or from the part where injury is dreaded. In order that this derivative action may be efficient, the water should be as hot as can be borne by the patient, or at any rate sufficiently so to redden the skin. The quan-

tity of water employed should be sufficient to come up to the patient's knees when the feet are in the bath. A zinc pail answers very well for the purpose. Frequently mustard is added to the water to increase its derivative effects. Three or four tablespoonfuls of mustard are sufficient for each bath. The feet must be thoroughly dried on coming out of the bath, and a warm pair of stockings immediately put on; and after the patient has been placed in bed, hot bottles should be applied to the feet. This bath is also sometimes made use of in cases of difficulty of breathing. In order to promote perspiration a blanket would be placed over the patient's legs and encircling the bath as well.

Cold Douche.

In some cases of fever, and in certain brain affections, this form of bath is made use of. No percussion need be employed in this instance. Frequently the medical attendant orders a bath, merely mentioning the name, and without giving any instructions as to the temperature. Thus he may order a cold bath, a tepid, a warm or a hot bath, without giving any further injunctions, and in order that the meaning attached to each of these words may be known, the following table is introduced, giving the degree of heat

which is represented by the terms thus employed :—

Bath.	Bath.
Cold.....50° to 65° Fahr.	Tepid..85° to 94° Fahr.
Cool.....65° to 75° "	Warm. 94° to 98° "
Temper. 75° to 85° "	Hot...,.98° to 112° "

Vapor-baths are also employed :—

Tepid bath, 90° to 100°. Warm bath, 100° to 115°.

Hot bath, 115° to 140°.

We shall now notice a few of these baths in detail.

Hot Douche-Bath.

The object of this bath is to combine heat and percussion, and this may be accomplished by pouring the water through a narrow tube so as to cause it to strike forcibly upon the part, at the same time keeping up beating by means of some soft material. The douching may go on for about a half-an-hour at a time, after which the patient should be put to bed and perspiration promoted. This bath is very useful in chronic rheumatism when the joints have become enlarged and painful.

The Cold-Bath.

This bath is now employed to promote the vigor of the constitution, and is used with a view to causing reaction. The best time to take the

cold bath is in the morning, but as many invalids are unable to produce the necessary amount of reaction at this time, it had better be deferred until after breakfast, when the body is in a condition more fitted to stand the shock. The patient ought not to remain in the bath longer than five minutes, as reaction may be prevented and danger result in consequence.

Temperate-Bath.

The temperate-bath causes less shock than the cold, and consequently is followed by less reaction. It is better suited for invalids and children than the cold.

Tepid and Warm Baths.

Tepid and warm baths are used in disease to promote perspiration and increase the action of the skin, when the latter is hot and dry. It is necessary when these baths are employed, to maintain the temperature of the water throughout, and in order to insure this being done, the water should be tested from time to time by the thermometer, and hot added when necessary. The period of immersion varies from a quarter to half-an-hour. These baths are of great service in the diseases of children. If the child is too feeble to sit erect, a sheet may be spread from

one side of the bath to the other, and the child lowered to the necessary depth.

The Hot-Bath.

This bath should not be employed recklessly, as harm may result from its use. Its action is that of a powerful stimulant, increasing the force and rapidity of circulation and causing copious perspiration. It should not be used in cases of heart disease, or when there is any tendency to fainting. It is useful in cases of kidney disease and diseases of the liver. The period of immersion had better not exceed a quarter of an hour, lest exhaustion should result.

Vapor-Bath.

The vapor-bath is very useful in promoting perspiration, and is employed as follows:—The patient being seated on a chair, a bucket or jar filled with boiling water is placed at his side, and the whole enveloped in a blanket. Friction may be employed, if necessary, while the patient is in the bath.

Other Baths.

There are several other baths which are not so frequently employed as those already mentioned, but are nevertheless sufficiently well established in domestic medicine to require notice here. They

are the *bran-bath*, the *starch-bath*, and the *gelatine-bath*. The *bran-bath* is prepared by boiling a pound of bran for a quarter of an hour, straining it and adding it to the bath. The *starch-bath* is made by mixing half a pound of starch or potato-mash in two or three quarts of water; while the *gelatine-bath* is prepared by dissolving a quarter or half a pound of gelatine in a quart of water. These baths are emollient or soothing in their action. There are other baths, such as those made with aromatics, which are occasionally employed, but which require no notice here.

CHAPTER XVIII.

APPLICATIONS.

SOMETIMES these are medicated and rendered more soothing by the addition of opiates; but the principal object for which they are employed is to convey warmth to a part. The best application of this kind is made by wringing a flannel—by means of two sticks turned in opposite directions—out of boiling water, and then shaking it up, apply it lightly over the part. In this way the heat may be retained for a considerable time. In order do to this thoroughly, two pieces of flannel should be made use of, each of the pieces being about three feet long, and having the ends sewn together so as to admit of the boiling water being wrung *out* of them. One of these should always be getting ready while the other is being applied. The coarser the flannel the more efficiently does it act; owing to its diminished power of conducting heat, warmth is longer retained.

Cupping.

Another thing that is often done with the best results, is cupping. There are two kinds of

cups—wet and dry. To apply them, get ready four or five wine-glasses or small tumblers (unless the regular apparatus can be had), some blotting paper or cotton-wool, alcohol in a saucer, and a lighted candle; soak small pieces of the paper or cotton in the alcohol, light one, toss it into a glass held in the hand, and after a second reverse the glass quickly over the place to be cupped, and so on with each of the glasses. The skin under the glasses will puff up at once; the glasses should remain from five to thirty minutes, as ordered. To remove them, insert the thumb-nail under the glass, letting in air. This is dry cupping.

If wet cupping is ordered, snip the puffed-up skin here and there, and apply the glasses as before; a little blood will now be seen; remove the glasses, as in dry cupping.

Poultices.

There are few applications more constantly in demand in sickness than poultices; and yet few people make them well. Poultices, when made well, should be sufficiently thick to retain their humidity, but not too thick, as they may then press injuriously upon the part to which they are applied. They should be of uniform consistence throughout, and ought to be applied at a

proper temperature. This last can generally be sufficiently accurately ascertained by applying the poultice to the back of the hand or to the face before putting it to the part.

Linseed Meal Poultices.

That which is of most frequent use is a poultice made of linseed meal. The meal should be procured from those who can guarantee its being well prepared, as much that is sold is objectionable, from this quality being wanting; and unless it is good, it may occasion considerable irritation of the skin, giving rise to redness and eruptions. Linseed meal derives its emolient properties from two principles which it contains, the one an oil, and the other a mucilaginous substance. By the presence of the latter the water is retained in the poultice; while, by the presence of the former, the entrance of air is prevented, and heat retained. Besides this, the oil exercises a soothing influence upon the part to which it is applied. It is very common, in making a linseed meal poultice, to pour boiling water on the meal, and stir it up till it is of the proper consistence; but poultices so made are seldom homogeneous, and, in consequence, do not retain either heat or moisture well. The poultice, to be properly made, should be boiled till it is of the con-

sistence of a thick pulp, when it will be found to retain heat and moisture longer, and answer the purposes for which it was intended better than if this precaution is neglected. Instead of using water alone, milk and water may be employed, or decoctions of mallows, flaxseed, etc., by which the emolient properties of the linseed meal are increased. An ounce of laudanum can be poured over if the pain to be relieved is great. The emolient action of the poultice may be further increased by smearing the surface with olive oil or lard, which substances have the additional advantage of allowing the removal of the poultice with the greatest facility. Many people are in the habit of interposing a piece of cloth between the poultice and the part to which it is applied. As this is unnecessary, it had better be done without; or, if anything of the kind is made use of, let it be of the lightest possible material, such as a piece of gauze. In order to prevent evaporation and retain heat longer, a piece of oiled silk may be placed external to the poultice. Care should be taken in placing the poultice to see that there is no chance of its slipping and the surface being left bare. The means to be adopted for this purpose must, of

necessity, vary according to the part of the body to which it is wished to apply the poultice.

Other Poultices.

There are many other poultices which are good, and in frequent use, and are worthy of notice here. As most of them are to be used under advice of a physician, we will simply give receipts for making those which will most be used.

Bread-and-Suet Poultice.

An excellent healing poultice when the skin is broken is made by mixing equal parts of bread crumbs and mutton suet in hot water over the fire until they are thoroughly blended.

Yeast Poultice.

Mix a pound of linseed or oatmeal in half a pint of yeast, stir gently over the fire; when warm, spread on a cloth.

Hop Poultice.

Fill a thin bag with hops; steep awhile in hot water; wring out.

Charcoal Poultice.

Soak two ounces of bread crumbs in half a pint of boiling water; add slowly a wineglass of linseed, and when well mixed, stir in two table-

spoons of powdered charcoal, mix thoroughly, and over the surface of the poultice, lastly, sprinkle some charcoal. Renew poultice often.

Slippery Elm Poultice.

This is made like the linseed, using ground slippery elm.

A Jacket Poultice.

An excellent poultice, which is often used in pleurisy, is made as follows: Cut a loose-fitting jacket of cotton cloth without seams, and a second one of same shape, for lining. Sew them together at the edge, leaving only a place through which to put in the bran. Quilt it here and there with large stitches to keep in place. Soak it in boiling water; when scalded, take out and, by pressing on a tray, squeeze out the excess of water and put on the patient next to the skin, holding it close to the body with a wide bandage. It may be necessary only to fill the front and sides with bran. A soft poultice, made in this way, half an inch thick, can be used several times.

Mustard Plaster or Poultice.

These being of frequent use in domestic medicine, a few words in regard to them are necessary here. As mustard is frequently adul-

terated, and its action in consequence impeded, we should endeavor to obtain only that whose quality is undoubted; and to attain this object, it had better be procured from the druggist. The goodness of the mustard may be judged of roughly by placing a little upon the tongue, and perceiving the nip imparted to it. The ordinary mustard poultice is made by sprinkling the surface of a linseed meal or other poultice with mustard, and covering the surface with muslin to retain the mustard in place. Should a poultice of mustard alone be prepared it ought to be made with *tepid* water, as this develops the active principles of the mustard best. It should then be spread upon a piece of rag and applied to the part.

The length of time which mustard should be kept on varies, some skins being much more sensitive to its action than others. In the case of children and those adults who are delicate and sensitive, a period of ten minutes will generally suffice for its application; in others it may be kept on for a quarter or half an hour. In those who are insensible, care must be taken not to allow the mustard to remain on longer than this, as ulceration or gangrene may result. Recently, instead of the ordinary mustard, mus-

tard leaves have been used, and have been found very effectual in their application. They are exceedingly convenient, and can be cut to any size or shape that may be required.

Blisters.

No blister should be applied unless ordered by the physician. By the careless application of blisters, large and disfiguring scars may be left, and much harm result. There is also danger that the cantharides of which they are composed may be absorbed and give rise to strangury. With a view to obviate this, blotting paper soaked in oil has been interposed between the blister and the skin. By dissolving the active principle of the cantharides more quickly its action is rendered more prompt, and in this way it was thought that the occurrence of strangury would be prevented. The best application, however, for this purpose is to sprinkle the surface of the blister with camphor. A solution of camphor in ether may be made by pouring ether over a piece of camphor till the camphor is dissolved. Some of the solution thus prepared should then be sprinkled over the surface of the blister; the ether evaporates, and an invisible film of camphor is left behind. The

blister is usually allowed to remain on for six or eight hours; but in those who are of an irritable temperament it may be removed sooner; and if it has not risen, a poultice applied after its removal will generally effect this. The blister should be retained in position by means of a bandage suited to the part to which it is applied, or by strips of adhesive plaster, or by being spread upon plaster. Previous to applying the blister the only preparation that is required is to wash the part with soap and water and dry it well with a rough towel, using sufficient friction, while so doing, to make the part glow. Some prefer applying mustard previous to applying the blister, but this is unnecessary.

After Treatment.

The after treatment of the part will vary according as it is desired to keep the sore open or to heal it. Usually it is desired to heal it, and for this purpose, on removal of the blister, the blebs should be cut with a pair of scissors in their most dependent part, after which a piece of fine cotton wool should be applied. On removing this three or four days after, the sore will generally be found to be quite healed. Instead of cotton wool being used, the sore is

frequently dressed with spermaceti ointment spread upon lint. This also forms a very nice and cooling application, and answers well.

Should Sore be Kept Open.

Should the intention be to keep the sore open, the cuticle must be removed by cutting round the edges with a pair of scissors; or, instead of doing this, a bread poultice may be applied, which will answer equally well for this purpose. Some irritating substance is then applied upon a piece of lint or rag, which should not be larger than the blistered surface, as it would then unnecessarily irritate the surrounding sound skin. The substance which is most usually employed for this purpose is savine ointment. As a film results from the application of this ointment, it ought to be removed by means of a poultice each time before a new dressing is applied. If this is not attended to, the part will dry and heal. Sometimes it is desirable to cause a more rapid blister, in which case blistering fluid should be made use of. This should be painted on with a camel's-hair pencil, care being taken to prevent it spreading beyond the part which it is wished to act upon. This forms a very ready and efficient means of producing a blister. The

strong solution of ammonia is sometimes used for the same purpose, and here the same care must be taken to prevent it spreading as in the former case.

Leeches.

Leeches are not now so frequently used in the treatment of disease as they were formerly; but as they are still employed, a few hints may be given as to the best manner of applying them. There are several kinds of leeches, but the one most generally employed is the olive-colored leech. It has six longitudinal stripes upon the back, and the quality may be judged of by the readiness with which it contracts into the form of an olive, as well as by its lively movements and brilliant appearance. Leeches vary in size, and the wound which they make is proportionate thereto—the large leeches making a larger wound, and the small leeches making a smaller one; so that in the case of children, when the application of leeches is deemed necessary, only those which are small should be made use of. Leeches which have been previously used ought not to be employed in the treatment of disease—they seldom act well a second time; and besides, as leeches take a long time to get thoroughly rid of the blood they have taken, dis-

ease may be carried from one person to another. Used leeches may be known by taking and squeezing them from the large to the small end, when, unless several months have elapsed since their former application, they will yield a small quantity of blood. This test is not, however, an infallible one, as the blood may be present from other causes than that mentioned, as, for example, the manner in which they have been caught; but whenever a leech on being squeezed yields blood, it should not be used. When leeches are shedding their skin they are not of so much value in the treatment of disease.

How to Make Leeches Adhere.

Different methods are adopted by people to make leeches adhere, but generally those which are in good condition take best on applying them immediately after removal from the bottle. They should be held in a piece of clean rag, and thus applied to the part; or a cylinder of paper may be made, into which they can be put; or a glass may be inverted over them. Other means than these are sometimes had recourse to, such as scooping out the interior from half an apple or potato, and inverting the same over the leech. The part to which the leeches are to be applied

is frequently "prepared," as it called, by bathing it with milk and sugar, etc.; but all that is necessary in this way is to cleanse the part well with soap and water, and then employ friction by means of the back of the hand, or a piece of flannel. This will answer better in making the leeches adhere than anything that can be applied to the part with a view to entice them to fasten. They usually remain adherent for three-quarters of an hour to an hour, after which they drop off. No attempt should be made to pull them off, as by so doing the teeth are sometimes left in the wound, and an abcess may result. Should they remain on longer than is necessary, in a torpid state, and after they are filled with blood, a little pepper sprinkled over them will generally serve to remove them.

After Removed.

After the leeches have either fallen off of their own accord, or removed as advised, bleeding is usually kept up for some time by means of hot fomentations, or, what will answer equally well, linseed meal poultices, changed every half-hour. The time during which the bleeding is allowed to go on, will vary according to the amount of blood which it is desired to abstract. When sufficient blood has been taken from the part, the

fomentations or poultices are removed, and on their withdrawal the bleeding generally ceases. Occasionally, however, the bleeding goes on and may prove very troublesome to check. Should this occur the wounds must be wiped perfectly clean, all blood being removed, and before any fresh accession of bleeding takes place a piece of cotton wool or shredded lint applied to the part.

Checking Hæmorrhage.

A popular remedy for checking hæmorrhage is cobweb, which occasionally answers very well here. Should these means fail, recourse may be had to powdered starch or rice, and on all of these proving ineffectual, a piece of lint, or a pledget of cotton wool steeped in tincture of the perchloride of iron should be applied to the part. This is often of great service in checking hæmorrhage when other simpler and more ordinary remedies fail.

How Bleeding Is Kept Up.

Bleeding may sometimes be kept up from constant movement of the part to which the leeches have been applied. Thus, frequently in cases of pleurisy leeches are applied to the sides, and on their removal the constant movement of the ribs during inspiration and expiration sometimes pre-

vents coagulation of the blood in the wounds and leads to hæmorrhage. There are also some parts of the body more liable to bleed freely than others; thus, where the skin is thin, this may occur; and lastly, there are people with a peculiarity of construction which makes them liable to bleed most profusely on the slightest prick. In such, leeches should be employed with very great caution.

Enema.

Enema are given either to relieve or control the bowels, or for the purpose of nourishing a patient not able to take food by the mouth.

For the first purpose, from one to two pints of liquid may be used: warm soapsuds, with castor oil or sweet oil, in such proportions as the doctor may order; or where diarrhœa is to be controlled, less fluid: probably thin starch mixed with cold water, and some astringent or opiate, as thirty drops of laudanum; in all cases the doctor's directions must be asked and followed.

For nourishment, various things may be given: beef tea, milk and brandy, strong soups, beef juice and brandy, etc., as is prescribed, but for nourishing enema not more than four to eight ounces should be given; more than this may simply irritate and not be retained. The fluid

must be retained as long as possible and no effort made to discharge it.

Salt Enema.

Give one and one-half ounces salt in one pint of gruel warmed.

Oil Enema.

Either sweet or castor oil given clear, six to eight ounces, warmed sufficiently to make it flow freely.

Oil and Turpentine Enema.

One-half ounce of turpentine; one and one-half ounces of castor oil; three-quarters pint of gruel.

Nourishing Enema.

Strong beef tea, or beef blood squeezed from slightly boiled beef, four to six ounces; cream, one ounce; brandy, as ordered.

Egg and brandy may be eaten together and given by the rectum, also milk, eggs and milk, etc., but not more must be given at one time than is likely to be absorbed; four to eight ounces in all is enough. For a child give less, four to six ounces.

Opium Enema.

Make a thin boiled starch and let it cool; do not use more than a teaspoonful of raw starch for one enema, and thin the mixture with

cool water, stirring it all the time if it is too thick, when cold, to pass through the tube. To two ounces thin starch-water add thirty drops of laudanum, more or less, as ordered. Children will require less. Ask for directions.

CHAPTER XIX.

DIET DURING DISEASE AND CONVALESCENCE.

IN disease strict attention to the diet is of the greatest consequence, and although the physician is generally careful to attend particularly to this, and give his instructions regarding it, nevertheless the carrying out of the details is left to those in charge of the sick. Generally the physician, in giving injunctions with regard to the diet of the patient, mentions certain classes of food which he considers suitable to the case and to the stage at which the disease has arrived, thus leaving some latitude for those who are in attendance upon the sick to vary the particular article from time to time.

Quantity of Food.

The quantity of food given in disease should be carefully regulated, and the quality ought in

every case to be above suspicion. An egg, whose taste suggests to the patient's mind anything akin to badness, may do him much harm by partaking of it, and, besides, may give him such a dislike to this article of diet as to deprive him of its nutritive properties during the remainder of his illness, and so it ought to be a rule that none but perfectly fresh eggs be admitted into the sick-room. The more recently laid eggs are the better, and none that have been kept by processes of varnishing, etc., to prevent their becoming bad, should ever be used. If once your patient gets a distaste for them, your efforts may be unavailing to get him to try them again. Remember his stomach is weak, and requires enticing to take food, and anything that causes disgust, creates nausea, or makes his stomach revolt at sight of it, is very apt to be productive of harm.

Hours for Taking Food.

The hours of taking food should also be carefully regulated, and as far as possible these should coincide with his ordinary meal-times during health. In active disease all solid nutriment, and that which is stimulating in its nature, had better be withheld from the patient after five o'clock in the afternoon, as towards

night he becomes feverish and restless; and if food that has a stimulating effect is given, or the stomach called into greater activity by solid food being given it to digest, the state of vascular excitement to which digestion gives rise produces a physiological fever to be superadded to the one from which he is already suffering. Therefore, let it be a rule that only fluid food be given during the evening and towards the approach of night, and let this be of as light and unstimulating a character as possible, lest the patient's symptoms be aggravated and harm result. When a patient is suffering from difficulty of breathing, solid food given at night has a tendency to augment it, and so should be avoided.

Obey the Physician.

Of course, should the necessities of any particular case demand a different line of treatment than that which we have recommended, or should the medical attendant have given directions at variance with those which are here laid down, regard must not be paid to what is intended to be of general application, but the physician's instructions be minutely obeyed. In every instance the physician should direct the diet of the patient, ordering those things which

he considers necessary and best adapted to the nature of the case, and he should also regulate the quantities to be given at one time and the hours best suited for giving the patient nourishment. Some cases require that nourishment be given more frequently and in smaller quantities at a time than others, hence the necessity of careful regulation on the part of the physician, and the scrupulous carrying out of every detail by those who are in charge of the patient. The effect of the different articles of diet should be watched by those in attendance, and the result communicated to the physician. In this way much valuable information may be given, which will doubtless prove serviceable in the management of the case.

Patient's Desires.

Another point to which attention should be directed, is to any desire which may be expressed by the patient in regard to special articles of diet. These requests should not be ignored; frequently nature, in disease, is the best judge; and, at any rate, whatevever wish has been expressed by the patient should be carefully noted and communicated to the medical attendant, who will endeavor, as far as possible, to comply with it. It is quite possible that things may be

asked for which, if given, would prove injurious to the patient. This daily happens in the case of children, and if parents were to accede to their request without consulting with the physician, much harm might result in consequence. Caution is therefore needed on the part of the attendants, to distinguish between a real desire and a mere whimsical crave, the gratifying of which might prove injurious to the patient.

Articles Patients Dislike.

When any article of diet causes the patient disgust, we must not insist upon its repetition. Vegetable soups, when made for the sick-room, should not be loaded with ingredients; the patient's stomach can rarely stand soups of this description; and they are apt to create a disagreeable loathing towards a kind of nourishmentment which, if properly made, is very valuable, both during disease and convalescence. For the sake of convenience, we shall divide the different articles of food used during disease and convalescence into two classes, solid and fluid aliments.

SOLID ALIMENTS.

Milk.

This article of diet, which forms the sole sustenance of young animals, and their principal

food during the early years of life, is one, the importance of which, in the treatment of disease, cannot be over-estimated. When the stomach is young and tender, nature provides this substance for the support of her offspring, and the maner in which life is sustained, and growth is enabled to go on, is sufficient proof of its great nutritive value; and when the stomach is again in a feeble state, and the system requiring nourishment with as little expenditure of energy as possible, what form of food should be able to answer so well as that which was the only source of supply in early life? For easiness of digestion, and for nutritive value, there is nothing to take its place, and in the treatment of all diseases milk ought to occupy the very foremost place.

Boiled Milk.

Like all fatty foods, it is more easily digested when some seasoning is given along with it, and for this purpose nothing answers so well as sugar. Salt and other substances may also be used, but sugar on the whole does best. When milk is given cold it is apt to give diarrhœa in some people, and it also increases the urinary secretions, so that in order to prevent these occurrences, it should be boiled. Water should

not be added, as diarrhœa may return, or be kept up if the milk is thus diluted, even although it has been boiled.

When Milk is Best for Use.

Milk answers best in the treatment of disease if used as it comes from the cow, that is before the curd and whey have separated. The component parts of milk are not so good, nor do they prove so serviceable as the milk itself in which they are combined. The cream in the milk, before separation has occurred, is the most easily digested and most nutritive part of the milk, but when separated it does not answer so well in the treatment of disease. The curd, also, when given alone, is indigestible, and whey is apt to prove flatulent, although containing much nourishment.

Eggs.

Eggs form a most important article of diet in the sick-room, but in order to obtain the large amount of nourishment which they are capable of supplying to the body without interfering with digestion, they must be fresh and only lightly boiled. New-laid eggs only should be admitted into the sick-room, and they are best adapted to a delicate stomach when lightly boiled. Any other mode of preparation than this, tending as

it does to coagulate the albumen, renders the egg more or less indigestible, and consequently bad as an article of diet for the sick. It is a difficult thing, however easy it may appear, to get an egg properly cooked, and in that state best suited to an invalid's stomach. Usually eggs are boiled too long, the white being quite hard instead of milky, as it ought to be when they are properly done. A good rule to follow is to keep a hen's egg two minutes in boiling water, and two minutes more in water below the boiling point, when it will have undergone that amount of preparation which renders it most suitable as an article of diet in the sick-room. Sometimes mulled eggs are employed, which are made by beating the yolk of an egg with some orange-flower water or tea, sweetening with powdered sugar, and then adding boiling water, and while so doing, keeping up constant stirring.

Fish.

When the digestive powers are still feeble, and have not yet regained their former tone, and when the system is unable to stand the greater vascular excitement which accompanies the digestion of meat, fish forms a very nice article of diet. Fish is easy of digestion, and creates little vascular excitement, and consequently forms a

light and wholesome article of diet for the invalid. It answers very well during the transition from fluid food to a meat diet. Only rock and flat fish, such as whitings, soles, turbot, haddock, cod, and flounders, should be employed in the sick-room. Eels, herring, mackerel, trout and salmon, being more heating in their nature, although a more nourishing article of diet are not so well adapted to the invalid as those already mentioned. Fish ought simply to be boiled, as in that condition it suits the patient best, being more easily digested than when fried or cooked in any other way. Oysters, being easy of digestion, may be given to the invalid, but crabs, lobsters, and other shell-fish should not be admitted into the sick-room.

Bread.

If well made and kept for a sufficient length of time, bread forms an important article of diet. Starchy matters, used as food, such as tapioca, sago, arrowroot, etc., contain but little nourishment, and should not be too much employed.

Meat.

White meat, such as chicken and veal, and dark meat, such as beef and mutton, are best prepared for the sick-room by boiling or roasting.

When the patient is in a fit state to be permitted solid animal food, that which is easiest of digestion should be selected and prepared as before indicated. With regard to the relative digestibility of different articles, tripe, lamb, and fricasseed chicken are easy of digestion; beef, pork, mutton, veal, and boiled and roasted fowls are rather less digestible. Salt beef and pork are very difficult of digestion. It has been found, by actual experiment, that the first three disappear from the stomach in about two and three-quarter hours; those enumerated second taking from three to four hours, and the two last not disappearing till four and a quarter hours had elapsed. The mixing together of different articles of food aids digestibility; thus, when fat is given along with meat the digestion of the meat is assisted. Minuteness of division has also much to do in assisting the stomach with its work. The varying of the diet is of great importance, and should never be lost sight of, as the constant repetition of the same article from day to day is apt to lead to a distaste for it. In children, especially, are the good effects of variety manifested. Venison, although more nutritive and more digestible than mutton, is of a more stimulating character, and hence not so well suited as an article of

diet in the case of invalids. Only slight cooking should be employed in the case of dark meats, but thorough cooking is requisite in the case of white meats to make them suitable for the sick-room. To make these articles of diet serve their purpose well, there should also be a softness of texture, a freedom from stringiness, and a delicacy of flavor about them. Raw foods, ragouts, and all pastry stuffs are bad, and must on no account be admitted into the sick dietary.

Vegetables.

Potato, cabbage, cauliflower, asparagus and spinach should be used in moderation in the diet of the sick. In preparing them they should be boiled until they are soft and very soluble, nothing being left that might act upon the intestinal canal as an irritant. When thus carefully prepared they are free from all stimulant properties and answer very well as articles of diet in the sick-room.

Fruit.

Apples or pears stewed seldom do a patient any harm, and generally prove grateful to him. Prunes are also very useful, inasmuch as they act upon the bowels and keep up a mild aperient action. Ripe peaches and grapes are admissible, the stones

and skins being carefully rejected. Strawberries may also be used. They are easy of digestion, cooling, and are little stimulant. Currants and gooseberries had better be done without, as harm may follow their use. It is always advisable before giving fruit of any kind to a patient to obtain the sanction of the medical attendant. In typhoid fever strict guard must be upon the patient lest friends, in mistaken kindness, bring him fruit, and he partake of it. In this disease the bowels are in such a tender state that the slightest irritation may give rise to the most serious results.

Jelly.

The error that calf's-foot jelly is a substance possessed of great nutrient value, is one that is very widespread in the popular mind, and accordingly patients are constantly given it and eat it under the impression that they are partaking of an article of diet that is strength-restoring and health-reviving in no ordinary degree. The truth is, that the amount of nourishment contained in it is very small indeed, and it must never be trusted to for the repair of tissue waste that has occurred during disease. Its use in the sick-room ought never to take the place of those articles of diet, the dietetic value of which is undoubted.

FLUID ALIMENTS.

Water.

Given in small quantities at a time during fever, nothing is so grateful to the patient as cold water. Much harm may, however, be done if the thirst of a fever patient is satisfied with *large* quantities. It is wonderful how grateful to him a spoonful of cold water is, and how far it will go in quenching his burning thirst. The best kind of water for use in the sick-room is rain or river water. All hard waters are inadmissible here. In cases where it is desired to increase the functions of the skin and promote perspiration, hot drinks of various kinds are given in preference, but in all of these the beneficial agent is the water, whatever be the nature of the diluent that is added.

Toast-Water.

This is one of the most frequently administered drinks of this nature. The water is slightly colored, and is flavored by the bread, which ought not to be charred in making this drink. To those who do not care for simple water this may form a good substitute.

Barley-Water.

This is one of the oldest ptisans of the sick-room; being the drink almost exclusively employed by

the Father of Medicine, and being more nourishing than simple water, it helps to diminish the rigors of a strict diet, and by its volume and temperature increases the action of the skin, while it does not act as a stimulant.

Gruel.

Gruel made from oatmeal is another substance in frequent use in the sick-room. Like barley-water, it is both nutritious and demulcent, but is more apt to undergo fermentation in the stomach, especially when such substances as sugar and butter are added. When it is desired to act as a diluent in disease the gruel should be made thin.

Rice-Water.

This is another drink that is frequently employed. It is credited with astringent properties.

Tea.

This substance is too much abused in health and disease to allow of its indiscriminate use as a ptisan in the sick-room. In the case of children its action on the nervous system precludes its employment; but in the case of adults, if properly used, it may prove both grateful and refreshing. Of course it must not be used in

too great quantity, nor must it be made too strong, as it may then tend to derange the stomach and lead to indigestion. A very good way to give it is to add sugar and milk, if the patient prefer it so, and then add to it about twice the quantity of cold water, and allow the patient to drink this. It forms, given in this way, a most grateful and refreshing beverage.

Miscellaneous Drinks.

There are also *acidulous* drinks, such as lemonade, which are in frequent use. They had better not, however, be employed without receiving the consent of the medical attendant. Coffee and cocoa are also sometimes employed, but had better be so only on the recommendation of the physician.

CHAPTER XX.

COOKERY FOR THE SICK-ROOM.

THE importance of bringing the art of cookery to bear upon the treatment of disease having of late years been recognized, and the great benefit that has arisen to patients in consequence, render a few remarks upon the subject necessary here, although for anything like details some of the works devoted to the subject must be consulted. To be able to present a dish to an invalid in an enticing form, and so prepared that the stomach shall be relieved of as much labor as possible, is by no means the smallest blessing that cookery bestows upon the patient. Nor should attention to these things be deemed undeserving of our consideration, nor anything that conduces to his recovery, however apparently insignificant, be regarded as trivial. The cookery employed in the sick-room should be of the simplest and most unpretentious kind.

Boiling, baking and roasting will accomplish everything that is necessary in this respect.

Boiling.

By boiling, the animal fibre is rendered softer, and can then be more easily acted upon by the

juices of the stomach. The manner in which the boiling is conducted has much to do with the result achieved; thus if it is allowed to proceed rapidly the albuminous matter contained in the meat is coagulated, and the meat is rendered dry, tough and indigestible. The water also should not be too rapidly brought to the boil in case the same result be produced. The nature of the water has also much to do with the result that is obtained; thus hard water employed in boiling beef or mutton always renders it more juicy and tender than when boiled in soft water. The reverse is the case with fish, which are always rendered firmer if boiled in water containing salt. Vegetables, on the other hand, are better to be boiled in soft water, and care should be taken to see that they are boiled a sufficient length of time. This precaution is frequently neglected, and the vegetables in consequence rendered less digestible.

Baking.

By baking, various kinds of puddings are prepared, only the lightest of which can be admitted into the sick-room. As few auxiliaries as possible should be employed in their preparation. They are, it need hardly be said, unsuitable articles of diet during active disease, and only

come into requisition when the period of convalescence has been reached.

Roasting.

By roasting, meat is rendered more nutritive, but is not so digestible as when it is boiled.

Active Disease or Convalescence.

The cookery for the sick-room, or that which is applicable during the period of active disease, differs considerably from that which is required during convalescence. The former includes the different kinds of farinaceous preparations, such as arrowroot, tapioca, gruel, beef and mutton tea, broths, etc., while the latter comprehends such farinaceous and animal preparations as are more nutritious and more stimulating than can be employed with safety during active disease.

A few receipts are here given of those preparations which are in frequent use in the sick-room.

Arrowroot Mucilage.

Take a tablespoonful of West Indian arrowroot, mix it with a little cold water, and then pour about a pint of boiling water over it gradually, constantly stirring until it is of a pleasant consistence. Boil for five minutes, sweeten with a lump of sugar, and grate a little nut-

meg on the top. Instead of the nutmeg a little lemon juice may be added.

Tous-les-mois.

This substance may be prepared like arrowroot, over which it has no advantage. They both contain little nourishment.

Sago.

Take a tablespoonful of sago, and macerate it in a pint of water on the stove, or a hot plate for two hours, and then boil for fifteen minutes, stirring constantly. It may be sweetened with sugar, and lemon juice added, as in the case of arrowroot. Instead of water, milk may be used. Sago has little nutritive value. It is frequently employed where non-stimulating diet is necessary.

Tapioca.

This may be prepared in the same way as sago, only being more soluble in water, it just requires half the time for maceration and boiling. Sweeten and flavor like sago.

Grit-Gruel.

Wash the grits in cold water, after which the fluid should be poured off, and fresh cold water added. Boil them slowly until the water last

added is reduced to one-half, after which strain through a sieve. Allow about an ounce and a half of grits to make one pint of gruel.

Oatmeal Gruel.

Take two or three tablespoonfuls of oatmeal, and rub it in a basin with a little cold water. Repeat the process, each time adding fresh water, until all milkiness ceases to be communicated to the water. Put now the washings into a pan, and boil till a thick mucilage is formed. These gruels contain more nourishment than sago, arrowroot or tapioca, etc., as they contain, besides starch, a small quantity of gluten. Sweeten to taste, and mix with milk if preferred. Butter and honey are sometimes added to them, but as these are apt to derange the stomach they had better be done without. Besides being used as articles of diet, these gruels are frequently employed as vehicles in which to administer substances when given in the form of clyster.

Iceland Moss Jelly.

Iceland moss contains a bitter principle, from which it should be freed before being used as an article of diet. For this purpose pound it in a dry state, and soak in tepid water along with a little bicarbonate of soda for twenty-four

hours, after which press in a coarse cloth. Add an ounce of the moss so prepared to a quart of water, let the mixture boil to one-half. Strain through a sieve, and sweeten and acidulate, or mix with milk according to taste.

Irish Moss Jelly.

Take an ounce of carrageen or Irish moss, and boil it in a pint and a half of water, sweeten and acidulate, or mix with milk as in former case.

Ground Rice Milk.

Take a tablespoonful of ground rice, mix well with a pint and a half of milk, add half an ounce of candied lemon-peel cut into slices, and boil for half an hour; strain while hot. This forms a very nice, nutritious article of diet for acute disease and early convalescence.

Bread Panado.

Grate a piece of stale bread, and put it into sufficient water to form a thick pulp; cover it, and after it has soaked for an hour, beat it up with two tablespoonfuls of milk and a little sugar; allow it to boil for ten minutes, stirring all the time.

Beef-Tea.

After removing all skin, fat and gristle, from a pound of rump steak, cut it into squares, and

put it into a large-mouthed bottle, add a little salt, and having corked it tightly, put it into a saucepan with cold water, and allow it to boil for six hours. Skim, strain, season, and serve hot.

Another Beef-Tea.

Take a pound of beef, and having minced it fine, put it into a common earthenware teapot with a pint and a half of cold water. Place the pot upon the stove, and allow it to simmer for at least three hours. Thus about three-quarters of a pint of good beef-tea will be obtained. Although beef-tea contains only a small amount of solid nitrogeneous matter, each pint of it, as ordinarily made, containing "scarcely a quarter of an ounce of anything but water," it nevertheless is possessed of great nutrient power in sickness. Added to other articles of diet, beef-tea greatly augments their power.

Essence of Beef.

Take a pound of gravy beef, free from skin and fat, chop it fine, put it into a mortar along with three tablespoonfuls of soft water, and pound it; then allow it to soak for two hours, put it into a covered earthen jar, with a little salt, the edges of the jar being cemented, and a cloth tied over the top. The jar should then be placed

in a pot half full of boiling water, and kept on the fire for four hours. It should then be strained through a coarse sieve, so that not only the fluid, but also the smaller solid particles of the meat, may pass. Two teaspoonfuls or more of this may be given at a time when there is great debility.

Chicken-Tea.

Take a small chicken, and after removing the skin and the fat between the muscles, divide it into two longitudinal halves, and after removing the lungs and everything adhering to the back-bone and chest walls, cut it into as thin slices as possible. Put the slices so cut into a pan, with a sufficient quantity of salt, and then pour over it a quart of boiling water. Cover the pan, and boil with a slow fire for two hours, and having allowed it to stand for half an hour longer on the stove, strain off the fluid through a sieve. Both beef-tea and chicken-tea can be employed during disease should animal diet be admissible, and by adding flour or other thickening substance, may be made useful as articles of diet during convalescence.

Mutton-Tea.

Take a pound of mutton, free from fat, cut it into thin slices, and pour a pint and a half of

water over it, allowing it to macerate, as in the preparation of beef-tea. After macerating, boil for half an hour and strain.

Veal-Tea.

Take a pound of fillet of veal, free from fat, slice, and then boil it for half an hour in a pint and a half of boiling water.

Scrambled Eggs.

For one egg allow three tablespoonfuls of boiling water, a little salt, and piece of butter the size of a hazel nut. Stir rapidly from the moment the egg is dropped into the water until the mixture is as thick as cold cream, but do not allow it to whey. Serve on thin slices of moist buttered toast. This is a good article of food during convalescence.

Rennet-Whey.

Take a piece of rennet and infuse it in a quantity of boiling water sufficient to remove from it all soluble matter; after pouring off the fluid, take a tablespoonful of it and mix with three tablespoonfuls of milk. Place the mixture so prepared before the fire, covering it with a piece of clean cloth. When a uniform curd is formed, remove it, divide it into small pieces with a spoon,

and separate the whey by gentle pressure. This forms a very pleasant drink in febrile conditions.

Barley-Water.

Take three tablespoonfuls of pearl barley, wash in cold water, and pour about a tumblerful of cold water over it; boil for fifteen minutes. Throw this water away, and having heated two pints of water, pour them over the barley; boil down to one-half, then strain.

Linseed-Tea.

Take two drachms of liquorice root bruised, and an ounce of linseed, and put them into a jug with a pint of boiling water. Allow the jug to stand near the fire for four hours, and then strain through linen or calico. Take care not to bruise the linseed. This decoction forms a useful demulcent drink in cases of cough and affections of the urinary organs.

White Wine Whey.

Take half a pint of new milk and put it into a deep pan. Place this upon the fire, and the moment the scum is seen rising to the edge of the pan, pour into it a glass of sherry, or other white wine, and sweeten with a teaspoonful of refined sugar. Allow it again to boil, stirring

constantly, and then place it at the side till the curd forms one lump; then strain the whey through a sieve or piece of muslin. It may be taken either cold or tepid, and is an excellent way of administering wine, when a moderate degree of stimulation is required.

Toast-Water.

Cut half a slice of stale bread, toast it thoroughly, and put it into a jug. Boil a quart of water, allow it to stand till cool, and then pour it over the bread. A little lemon or orange peel may be added. After it has stood for two hours decant. This forms a very agreeable drink in febrile affections.

Milk and Soda-Water.

Take half a pint of milk and sweeten it with a teaspoonful of refined sugar; bring it almost to the boiling point, and pour over it a bottle of soda-water. When there is much acid secretion in the stomach this will prove an excellent way of administering milk.

Egg Brandy.

Take the whites and yolks of three eggs and beat them up in five ounces of plain water. Add three ounces of brandy slowly, also add a little sugar and nutmeg. Two tablespoonfuls of this

may be given at a time. This is a very useful way of administering brandy in cases of prostration, as in typhus and other low fevers. Another good preparation is made by taking the white of a new-laid egg and stirring it up with a tablespoonful of cream, and adding to the mixture a tablespoonful of brandy, in which a lump of sugar has been dissolved.

Sago Posset.

Take two tablespoonfuls of sago, and put them into a pint of water; boil till a mucilage is formed. Take now the rind of a lemon, and rub a quarter of an ounce of loaf sugar on it, and put it, along with half a teaspoonful of tincture of ginger, into five ounces of sherry wine, then add this mixture to the sago mucilage, and boil for five minutes. A wineglassful of this may be taken at a time. It is an excellent preparation in great debility resulting from acute disease of a non-inflammatory nature. When the period of active disease is over, and that of convalescence taken its place, the patient is able to advance to something more substantial in the way of diet than the preparations that have just been mentioned. He is now in a condition to benefit from puddings of a farinaceous nature, and animal food that is non-stimulating and easy of digestion. Care must,

however, be taken not to advance to these articles of diet too rapidly, lest the stomach should be overtaxed, and the patient suffer relapse. By easy gradations let the food approach in character the ordinary diet of health. The following receipts are a few giving the preparation of the more ordinarily employed articles of diet during the period of convalescence.

Boiled Flour and Milk.

Wheaten flour, kneaded with water, is put into a linen cloth and tied firmly, after which it is placed in a pan with water and allowed to boil slowly for twelve hours. It is then placed before the fire to dry. The thick rind which has formed should be taken away on removing the cloth, and it should be again dried. A tablespoonful of this, grated and boiled with a pint of milk, is very good as an article of diet in recovery from diarrhœa or dysentery.

Arrowroot Pudding.

Rub a tablespoonful of arrowroot in a basin with a little cold water, and add to it, stirring constantly, a pint of boiling milk. With this mix the contents of one egg and three teaspoonfuls of powdered, refined sugar, which have previously been beaten up together. Boil in a basin, or bake. This

forms a very good pudding for the early stage of convalescence.

Arrowroot Blanc-Mange.

Take three tablespoonfuls of arrowroot, and make into a mucilage with water, then add milk in sufficient quantity and boil till it is of a proper consistence. Pour into a shape, and allow it to cool and set. It may be eaten with currant jelly or with lemon juice and sugar. Milk or beef tea may be used instead of water in the preparation of arrowroot mucilage. It should be boiled for twenty minutes. This forms a very nice light article of diet for early convalescence.

Oatmeal Porridge.

Into water that is kept boiling sprinkle from time to time a small quantity of oatmeal, stirring constantly while so doing, until a moderately consistent mixture is formed. Continue to boil, after adding the meal, for half an hour. This, taken with milk, forms a very good article of diet during early convalescence.

Rice and Apples.

Take a sufficient quantity of rice and boil it rapidly in hot water, then strain through a colander; expose for a quarter of an hour before the fire, and having stewed separately the requisite number of

apples, mix them together with a moderate quantity of sugar. This forms a nice dish for those recovering from acute disease.

Boiled Bread Pudding.

Take of stale bread half a pound; pour over it a pint of hot milk, and allow the mixture to soak for an hour in a covered basin, then beat up with the contents of two eggs. Put now the whole into a covered basin, tie a cloth over it, and place it in boiling water for half an hour. It may be eaten with salt or sugar.

Simple Rice Pudding.

Add two tablespoonfuls of rice to a pint and a half of milk, and let it simmer until the rice is soft. Take now two eggs, whites and yolks, beat them up with half an ounce of sugar, and add this to the preparation. Allow it to bake for three-quarters of an hour in an oven.

Macaroni Pudding.

To four tablespoonfuls of cinnamon water add two ounces of macaroni, and allow this to simmer until the macaroni is tender. To this add three yolks of eggs, one white of egg, an ounce of sugar, one drop of oil of bitter almonds, and a glass of raisin wine, all beat up together in half a pint of milk, and bake in a slow oven.

Batter Pudding.

Beat up the contents of two eggs with half an ounce of sugar, and mix this with a table-spoonful of wheaten flour and a pint of milk. Put into a basin of boiling water, and boil with a cloth tied over it.

Tapioca Pudding.

Make a pint of tapioca mucilage with milk, and beating up the yolks of two eggs with half an ounce of sugar stir this into the mucilage. Bake in a slow oven. Sago and arrowroot may be made into puddings of a similar kind and used instead. They are very good as articles of diet during convalescence.

Mashed Carrots and Turnips.

Having peeled the carrots and turnips, boil them separately in three successive waters, and having pressed the water out of them through a clean coarse cloth, mash them together with a sufficient quantity of milk to make them into a pulp, and season with salt. Place them before the fire until the surface seems dry. This will prove an agreeable dish in convalescence from severe disease, when the diet is restricted to farinaceous food and vegetables. There is nothing to prevent the use of most kinds of vege-

tables during convalescence, provided they are properly boiled.

Vermicelli, or Macaroni Soup.

To a quart of beef-tea boiled down one-third add an ounce of vermicelli or two ounces of macaroni previously well boiled in water, and boil down the whole to one pint; add salt to taste. Instead of vermicelli or macaroni, rice may be used. It should be added to the soup after its concentration, having been previously prepared by boiling and slightly drying before the fire.

Chicken Broth.

Take the yolk of an egg and beat it up in two ounces of soft water and add this along with a little parsley or celery to chicken tea, made as before directed, and boiled down one-half. Rice, vermicelli, or macaroni, properly boiled, may be added with advantage.

Mutton Broth and Vegetables.

Boil a pound of mutton chops freed from fat, slowly in a pan for two hours. Remove the chops, and to the remainder add three carrots and three turnips that have been peeled, cut into slices, boiled, and the water drained off, and two onions sliced and boiled, and season with a little salt

and celery. Simmer slowly for four hours. Put in the chops again and allow the simmering to go on for another hour.

Tripe.

Boil some onions in two waters, and partially boil a sufficient quantity of tripe. Then boil both together slowly till the tripe is soft and tender. Add salt and a few grains of cayenne pepper. As tripe is easily digested it forms a very suitable dish for a convalescent.

Rice and Gravy.

Let the gravy from a leg of roast mutton or a sirloin of beef stand until a cake of fat forms upon the surface. Remove this, and stir a sufficient quantity of well-boiled rice into it to constitute a meal.

Sago Milk.

Soak an ounce of sago in a pint of water for an hour, after which pour the water off and add a pint and a half of milk; boil slowly until the sago is well incorporated with the milk.

Water Souchy.

Take two flounders, soles, whitings, or haddocks, and boil them in a quart of water to one-third, so that the fish are reduced almost to a

pulp. Strain, and removing the fins from four other fish of the same kind, put them into the strained liquid. Add salt and cayenne pepper to taste and a small quantity of chopped parsley. Boil sufficiently long to render the fish eatable, and eat along with the sauce. This is easily digested and much relished by patients during convalescence from fever.

CHAPTER XXI.

DOMESTIC MEDICINES.

IT is not intended under this heading to mention a long list of drugs which may be used by the patient or his friends at their own discretion, but rather to mention a few of the simpler and more commonly employed remedies to be used during an emergency, and principally to have in the house in case the physician should be called during the night. To a person living in the country, at a considerable distance from help, much valuable time might be wasted in endeavors to procure what was wanted in time of an emergency. With a few of the simpler and more frequently employed remedies at hand, this might be obviated, and all disagree-

able after-reflections prevented. In the purchase of drugs it is absolutely necessary to procure none but the best.

Keep Medicines Under Lock and Key.

Drugs should be kept in bottles properly stoppered, and should be under lock and key. If this latter precaution is attended to, many of the disagreeable accidents which occur from time to time would be avoided. Unless care be taken to see that the bottles are properly closed, and the entrance of air excluded, the medicinal power of the various articles may be impaired, or what is worse, they may become more concentrated, as in the case of laudanum, and thus be rendered dangerous.

The following is a list of those drugs which are in most frequent demand in cases of emergency, and which it would be well for every one to have in the house, more especially if they are living in the country:

Magnesia.

This may be kept either in bulk or in powders containing from twenty to thirty grains apiece. In acidity of the stomach, magnesia is one of the best medicines that can be given, and is very certain in counteracting its influence. It may be ad-

ministered in doses of twenty to thirty grains to adults, and to those under ten years, from five to twelve grains may be given.

Castor Oil.

A bottle of the finest cold-drawn castor oil. This acts as a gentle but efficient purgative, and may be given in doses of a teaspoonful to children and a tablespoonful to adults.

Rhubarb.

A small quantity of the finest Turkey rhubarb should be kept in powders of from ten to fifteen grains each, one of which, given with the same quantity of magnesia, will act as a mild purgative in the case of an adult. It is useful in dyspepsia.

Epsom Salts.

The dose for an adult is half an ounce. They should be taken first thing in the morning, and warm drinks freely administered afterwards. They form, when so taken, an excellent saline purgative, and by stimulating the orifice of the bile duct, they cause an increased flow of bile, and so relieve the system.

Dill Water.

This is frequently given to children during teething, when they appear to be griped from the

presence of wind in the stomach and bowels. It would be better to attack the cause, as wind is merely the result of something more serious. A little magnesia may be given with advantage along with the dill water, which may be given in doses of a teaspoonful or more to a child a year old.

Lime Water.

This is an excellent medicine to give children along with their milk when there is any tendency to acidity, or where the bowels are relaxed to a greater extent than natural. One tablespoonful should be mixed with three tablespoonfuls of milk.

Aromatic Spirit of Ammonia.

This, which is sometimes called sal volatile, is a very useful stimulant in fainting, hysteria, or flatulent colic. It may be given to adults in doses of a teaspoonful in a wineglassful of water, and may be repeated at frequent intervals. A drop or two given to children in a little water is also useful in pain due to flatulence.

Ipecacuanha Wine.

In coughs of a bronchitic nature it may be administered in doses of from five to ten drops to children, and ten to twenty or more to adults. To young infants a drop will be sufficient at a

time. When it is wanted to act as an emetic it must be given in doses of half a teaspoonful to a teaspoonful at a time. In croup an emetic of ipecacuanha wine is often of great service.

Tincture of the Perchloride of Iron.

A small quantity of this should be kept in the house to arrest bleeding from leech-bites, etc., when other means have failed to do so.

Sweet Spirits of Nitre.

This is a valuable refrigerant in fever, and acts as a diuretic as well. It should be given in small doses of five or ten drops, largely diluted.

Laudanum.

Great care must be exercised in the use of this drug, as evil habits of laudanum drinking may be begun from its too frequent employment for the relief of pain. For an adult about twenty or twenty-five drops may be given for a dose. This drug should, on no account, be made use of for the relief of pain in children without medical advice, as much harm may result in consequence. Children are very susceptible of the action of laudanum, and none but the physician can decide the utility of employing it in any case.

Other More Simple Medicines.

Besides what has already been named, the following may be added to the medicine chest, and may be found useful: Camphor, camphorated oil, arnica, some good liniment, vaseline, court plaster, painkiller, mustard for plasters or ready-made mustard plasters.

The Administration of Medicines.

There are certain points in regard to the *administration of medicines* which are deserving of attention, and which we shall briefly notice here. In ordering the administration of a particular drug the physician leaves instructions as to the frequency with which he wishes it to be given; and in so doing he acts under the belief that every medicine produces a specific change on the system, which lasts a certain length of time and then tends gradually to disappear unless renewed. Accordingly, he renews the doses at definite periods, timing the succession of each, so that the effect of the previous one shall not have ceased before the action of the succeeding one has begun. It is very important that those in attendance upon the sick should pay particular attention to the physician's directions in regard to this; and if a medicine has been ordered to be given every four hours, the doses

ought not at one time to be three and at another five or six hours apart. Especially is it necessary to attend to this in the administration of such medicines as mercury, arsenic, etc., which have to accumulate in the system before their effects are manifested, and unless the action of the preceding dose is kept up, each succeeding one has to begin afresh.

Medicines Taken With Pleasure.

Many medicines, administered in their ordinary forms, are very disagreeable to the taste, and in order to obviate this they are frequently given in an effervescent state, in which condition they are much less objectionable and can be taken readily. Various substances are also used for the purpose of removing the taste left in the mouth after so many medicines, but for this purpose nothing answers better than a piece of dry biscuit. Many substances are given along with nauseous drugs, which have the power of greatly lessening or completely removing this disagreeable property: thus, a few drops of dilute sulphuric acid will greatly lessen the nauseating taste of Epsom salts; in like manner milk covers the taste of rhubarb, and warm milk or coffee that of castor oil. By infusing senna with cold water instead of warm, the disagreeable taste is greatly lessened.

Measures for Medicines.

Medicines are generally directed to be given in teaspoonful, desertspoonful, or tablespoonful doses, but as these are inaccurate measurements it is always advisable to have in the sick-room a graduated measure glass, into which the medicines should be poured and carefully measured before being given to the patient. One drachm is equivalent to a teaspoonful, two drachms to a desertspoonful, and four drachms, or half an ounce, equivalent to a tablespoonful. It is also well to have a smaller glass for the purpose of measuring any medicine that may be ordered to be given in drop doses. One minim is equivalent to a drop. Volatile medicines should not be poured out and then allowed to stand before being administered, but should at once be given on being poured from the bottle.

Difficulty in Swallowing Medicines.

Many persons have great difficulty in swallowing medicines when administered in a solid form; thus, some people find it almost impossible to swallow a pill, although they can perfectly easily swallow a piece of bread or meat many times larger. This difficulty arises from the mind being directed to the act, and on raising the pill to the

roof of the mouth, the sensation of a larger morsel not being conveyed to the mind, it becomes impressed with the difficulty of the task, and so fails to accomplish it readily. By putting the pill into bread or conserve, and making a larger mass of it, this is generally obviated.

Volatile Medicines.

Volatile medicines, such as ether, being very inflammable, should not be poured out of the bottle which contains them in too close proximity to the gas or the fire, as a disagreeable accident may result.

Idiosyncrasy.

Idiosyncrasy powerfully affects the action of medicines. Generally the effect of idiosyncrasy is to increase the action of drugs, and render a dose that would only act normally on one person productive of grave symptoms in another. Thus opium, instead of causing sleep, may give rise to delirium; a dose of calomel, that might be given with perfect safety in one case, might cause salivation in another. Many articles of food, as shell fish, which can be freely partaken of by some, produce a poisonous effect when eaten by others. The odor of ipecacuanha is followed, in some people, by a paroxysm of asthma. Some-

times the idiosyncrasy takes an opposite character, and the individual is then enabled to take poisons with impunity. Whenever a person is known to have any idiosyncrasy, the physician in attendance should always be made aware of it. As habit tends to lessen the action of medicines, as exemplified in the case of opium eating, any which the patient may have formed, and which are known to the friends, should be communicated to the physician.

Effects of Certain Doses.

As some medicines, in certain doses, give rise at first to effects which are calculated to excite alarm, but which ultimately pass off on the use of the medicine being continued, it is well that those in attendance upon the sick should be aware of this fact, and not alarm themselves unnecessarily. Whenever any action, other than that intended by the physician, is observed to follow the employment of a certain medicine, he should at once be told of it.

Not Name Medicine.

It is better not to mention the name of the medicine that is being given to the patient, as preconceived prejudices in regard to it may influence its action in an unnatural manner.

General Rules.

While strictly adhering, as a rule, to the directions given by the medical attendant in regard to the administration of medicines, those in charge of the sick may occasionally use their own discretion. Thus, when a medicine has been ordered to be given every four hours, and each dose is followed by sickness and vomiting, it would be very wrong to continue its use. Only those medicine bottles which are in daily use should be allowed to remain upon the table in the sick-room; all others should be carefully put away and kept under lock and key. Attention should also be paid to see that every medicine bottle is properly labeled, and no medicine should ever be used out of a bottle that does not bear the name or the directions upon it.

Children.

Before passing from the administration of medicines, it will be well to notice a few of the difficulties which the physician meets with, which are incident to the period of childhood, and with which he has to contend.

Two Kinds of Children.

There are two kinds of children constantly coming under the notice of the physician, each serving as an illustration of a special mode of up-

bringing, and representing two different classes of parent, but which are everywhere to be met with. There is first of all the *spoiled* child—self-willed, wayward, ever opposing its own will to that of its superiors, because in parental authority it has discerned weakness, as only a child can, and taken advantage of it. Then there is the child who has been brought up lovingly and well, who has been taught obedience, and whose will is made subservient to that of those by whom it is surrounded. There can really be imagined nothing more humiliating than the sight of a mother vainly endeavoring to get her child to take some medicine that has been prescribed for it, and at last giving up the attempt without making good her point. There are few things that do more to lower a parent in the estimation of those who know her than this absence of self-respect, and if many a mother knew in what a contemptible light she appeared in the eyes of those who were the unwilling witnesses of such folly, she would certainly endeavor to act differently in the future.

How Give Medicine to Children.

It is quite true indeed that no child is naturally desirous of taking medicines, and it is also true that a child soon discovers the difference between drugs and sweetmeats; but it is in this very

attempt to deceive children in regard to the true nature of what they are being given that so much mischief is done. Dr. West has said, in connection with this matter, "I look upon deceit as one of the most serious causes of difficulty met with in administering medicines to children. On the first occasion we may succeed by telling a child that the medicine offered to him tastes good, when in truth it is detestable. But we shall fail the second time, and shall raise up a thousand difficulties for the future. If the medicine is absolutely necessary, and the child too young to be reasoned with, he must be compelled to take it, by a kindly display of authority, and his passing sense of injury will quickly be forgotten. If he is old enough, tell him that the medicine has been ordered for the purpose of doing him good, and by making use of mild, but at the same time firm words, you will succeed in getting him to take it, especially if, after all else fails, you tell him he is a good child, that it is a pleasure to take care of him, and that you will not fail to tell the doctor of his good behavior. This truthfulness should be thorough-going; it should even prevent our saying to a child, 'You will soon be cured,' if the contrary really seems probable. When a child is convinced that we are telling him the truth, he feels confidence, we save

ourselves much annoyance, and procure the poor little patient great consolation. Leeches had been prescribed for a little child of three years. The leecher, a worthy old man, said, in order to encourage him, 'My dear little fellow, it is nothing.' The child turned to its mother and said, 'Mamma, is that true?' She hastened to answer no, but that she hoped that, for her sake, he would submit. The child became silent, and uttered not a cry nor a complaint during the operation."

Practicing Deception.

It will be seen then from the passage just quoted that the more upright our dealings are with children, even as regards the administration of drugs, the more likely are we to meet with success, and that nothing in the end is to be gained by practising deception. It is by no means an unfamiliar sight to the physician to see a parent coax a badly disciplined child to take some medicine, it may be a powder or something else, and when all efforts have been in vain, and promises and threats have proved useless, to see her mix it up with such a combination of different stuffs as are likely to do more harm to the child's stomach than any good the medicine is likely to accomplish given in that form. It need scarcely be said that when children

have been brought up in this way, the work of the physician is naturally increased, and can only be accomplished in a very unsatisfactory manner.

Examining Children.

Suppose, for instance, a child suffering from some chest affection. At the moment the doctor makes his appearance the child begins to cry or burst out into a rage, refusing to be examined. In this state of matters it is impossible to get more than an imperfect knowledge of the child's true state, for by the fit of crying or anger the real condition of things has become altered. The breathing is rendered more quick and hurried, the heart beats much more rapidly, the face is flushed, and altogether the child's true state is obscured, and it need scarcely be said that this exerts an injurious influence upon the child. Parents have it in their power to do a great deal in the way of preventing these unpleasant occurrences. Thus, if a mother would occasionally take her child, and make it undergo a mock examination, the examination afterwards by the physician, were such necessary (and how many are exempt), would be deprived in great part of its terror. No parent need be told how important it is in a case of suspected diphtheria for the physician to obtain a satisfactory view of

the throat, but frequently from the constant wriggling and tossing about of the head it is almost impossible to obtain more than the most cursory glance.

Much might be done by a mother occasionally introducing her finger into the child's mouth, and looking herself at its throat, to remove the terror to which such an operation gives rise when it comes to be done for the first time by the physician. In this way, it is in her power to be of real service to the physician, and to simplify his work very considerably.

As, to a child, the examination of the chest is a very formidable proceeding, the mother here also may be of much service. Were she occasionally to subject the child to a few tappings, the act of percussion when obliged to be performed by the physician would be deprived of many of its horrors.

The devices had recourse to by parents, in order to get their children to take some medicine that has been prescribed by the medical attendant, are many and various; but, as we have already seen, nothing is likely to be gained by an attempt at misleading the child. By far the best way is to tell the child frankly what you are about to give, and to insist in a gentle, yet,

if need be, in a firm manner, on the carrying out of your purpose.

CHAPTER XXII.

ACCIDENTS AND EMERGENCIES.

Bleeding from the Nose.

EPISTAXIS, or bleeding from the nose, is an accident which sometimes proves very troublesome, frcm the difficulty experienced in checking the flow of blood. Cold applications are generally had recourse to, and keys are sometimes slipped down the patient's back. Perhaps the best way to apply cold in this instance is to take a towel and soak it in water and lay it upon the back of the neck and face. This will often answer in checking the bleeding, but it frequently also fails, and recourse must be had to other means. Of these, perhaps the most potent is the raising of the hands above the head. Let the patient sit bolt upright in a chair, and let him raise his hands as high above his head as he can possibly raise them. This is frequently a very effectual means of checking bleeding from the nose. The introduction of a little burnt alum into the nostrils, as snuff, is

also a very good thing to try. Should these remedies fail, recourse must be had to medical aid.

Fainting on Loss of Blood.

Fainting on loss of blood is useful, as for the time it helps to arrest the flow, and should not be interfered with. After the bleeding is stopped the head may be raised, and a teaspoonful of good brandy in a little water may be given, and repeated every half-hour until the faintness has gone. The tight bandage tied around the limb may be an injury if long continued. Let there be no delay in sending for the doctor.

To Stop Bleeding from Cuts.

When the blood comes in jets with a spurt at each beat of the heart, an artery is cut. Lose no time in sending for a doctor; meantime, fasten a firm pad tightly over the cut, and, if the wound is in the hand or arm, compress firmly with the fingers the brachial artery; if the blood comes from the foot or leg, compress the femoral artery against the pelvic bone in the groin; if the head or body is injured, when the artery between the wound and the heart cannot be compressed, take a dry towel, fold it and press *firmly* upon the bleeding part, and do not

relax the pressure an instant until the doctor comes. One person may release another. It should be applied all about the wound, and when it is possible, the injured part should be raised above the heart.

If the flow of blood is slow and a *deep red*, there is less danger, but it must be stopped. Make a firm pad and press it over the wound, fasten it in place with a bandage; use it as in the other cases, and keep the part raised.

Foreign Bodies.

The introduction of foreign bodies into the nose, the ears, the eyes, or the throat is an accident that is of daily occurence. When a foreign body has by some mishap lodged in the throat, as, for instance, a piece of meat or some other substance, during the time of eating, it frequently lodges at the upper part, so that by making the patient open his mouth we may be able to see it, or at least to feel it. Now, when this is the case, the forefinger and thumb should be gently introduced into the posterior part of the patient's mouth, and an endeavor made in this way to seize hold of it and pull it out. Should this attempt, however, prove unsuccessful, and the foreign body be yet within sight, a further

trial might be made with the aid of a pair of forceps or blunt-pointed scissors, passing them cautiously back, and endeavoring in this way to extract the offending substance. Should these attempts, however, prove futile, or should the body have passed farther down the throat, so as to be beyond both sight and reach, the patient should be smartly slapped between the shoulder-blades. This slapping frequently has the effect of instantly causing the expulsion of the foreign body. Should the patient be a child, it should be taken by the feet and be tapped on the back, as in the former case. The article will frequently be dislodged and brought up by this means. Again, emetics are sometimes had recourse to for the removal of foreign bodies from the throat. It will sometimes happen that a small body getting into the throat will give rise to a disagreeable tickling sensation, and keep up incessant coughing. When this is the case, by giving the patient something dry and hard to swallow, as a piece of bread or hard biscuit, and afterwards a drink of water, the substance will be removed, and the tickling and coughing cease.

Foreign bodies, such as cherry-stones, beads, peas, and the like, are frequently met with in

the nose. If not very high up in the nostril, the finger may be able to reach above it externally, and by gentle pressure cause it to descend. Should this fail, however, or should it be so high up as to prevent this being tried, a little snuff may be introduced into the nostril that is free, when, by giving rise to a fit of sneezing, the offending substance may be expelled. Or again, a bent hair pin may be employed, and endeavors cautiously made to remove the foreign body in this manner.

In the ear, insects constitute a not uncommon foreign body, and unless removed may be the cause of very considerable irritation and suffering, or may set up active inflammation. Should an insect, then, have found its way into one or other ear, the best thing to do is to cause the patient to lay his head down flat upon the opposite side, and pour olive oil into the other ear until it is quite full, when the insect will generally be floated up upon the oil and can thus be easily removed. Should this fail another device may be tried. Take a piece of cotton wool, and having saturated it with a solution of common salt, introduce it into the ear and then press the hand firmly against it. The injection of a weak solution of carbolic acid is also made use of, and

frequently answers well in such cases. When other foreign bodies, such as pieces of slate-pencil, beads, and the like, have found their way into the ear, the best thing to try to do in the first instance is syringing. This may be done with an ordinary syringe and tepid water, but care must be taken not to inject the water too forcibly, as the drum of the ear may in this way be injured and permanent deafness result. Should the syringing fail a pair of forceps may be used, and the blades carefully introduced, and an effort made in this manner to seize the offending substance. The utmost caution must be observed in using the forceps, and for the same reason as was mentioned in speaking of syringing.

In the eye, specks of dust of various kinds are constantly finding lodgment, and unless speedily removed are apt, by the irritation to which their presence gives rise, to set up inflammatory mischief. When anything of this nature has entered the eye, the upper lid should be drawn down so as to overlap the under, and then allowed to go back of its own accord. In doing so the mote is generally removed and will be found adhering to the eyelashes, from which it can easily be wiped away. Should this simple means, however, fail, the lashes of the

upper lid should be taken hold of, and the eyelid bent over a match, toothpick, hairpin or knitting needle, and then the inner surface of the eyelid gently wiped, when the offending substance will generally be removed.

Stings.

Stings from mosquitoes, wasps, bees, etc., are frequently very troublesome, but generally give rise to no serious consequences. They may, however, prove dangerous if they are very numerous, as when an individual has been attacked and stung by a great many. The treatment consists in the application of cooling lotion to the parts, as of a solution of ammonia.

Bites.

Bites by dogs that are suspected to be rabid, and those by snakes of the more dangerous sort, require that no time be lost in the employment of efficient treatment. The wounds should at once be thoroughly washed and sucked, putting out the saliva at once, and then a hot iron applied so as to scorch all the tissues that are implicated. If this cannot readily be done the part should be cut out, the incisions being made well into the surrounding healthy tissue. This, however, is not so good as burning. When possible, tie a handkerchief

firmly around the limb above the wound. Warm fomentations and anodyne lotions should then be applied to the parts, and stimulants, such as aromatic spirits of ammonia, ordinary sal volatile, administered. It would be well in traveling in the country during the heat of the summer always to carry a little pencil of lunar caustic in the pocket. With this a bite could be instantly cauterized, and the patient's mind relieved of much anxiety.

Drowning.

On first rescuing a person from the water, turn the face downward for a moment and have some one pass the fingers into the mouth and hold down the tongue, so that the small quantity of water and mucus which collects across the windpipe may escape. If a shelter is *near*, carry the body to it as quickly as possible; if not, don't attempt it. Lay the body down with the head, neck and shoulders raised a little; take off the wet clothes from the chest and feet, first —and begin at once to make the attempt to restore respiration artificially. Kneel behind the body, take hold of the arms just above the elbow, draw them away from the sides and up to the head until the hands meet, counting one, two; lower them again, bending the elbows and

bringing them up over the pit of the stomach with pressure, counting three, four; continue this, making the whole movement *sixteen* times a *minute*, and do not stop for two *hours*. Meantime some one must be holding the patient's tongue out between the teeth, and others must be rubbing him towards the heart with all the warm things that can be collected. Cover him with dry coats loaned by the bystanders; keep a wide circle around him free, so the air may be secured. When vitality shows itself, brandy and water in small doses, often repeated, must be given, and milk or beef tea. Persons have been restored who have been under water thirty minutes.

Broken Bones.

The right thing to do in an emergency of this kind is simply to keep the part as still as possible until the arrival of a surgeon.

Take two shingles, two sticks, or even the leather covers of an old book; put them on either side of the limb, and fasten a couple of handkerchiefs round them at either end of the leg that is injured; it can, instead of this, be tied firmly to the other leg; this will probably bring it into the right shape. Put it close alongside the other and in the same position; tie a

scarf or handkerchief above the knee and two or three between the knee and foot.

If a collar-bone is broken, put the arm into a short sling supporting the elbow well. If a joint seems dislocated, do not attempt to pull it; a bone may be broken—keep it quiet and send for a doctor.

What to Do in Case of Fire.

If the clothes take fire, roll the child or grown person over and over; seize, if possible, or call for a rug, blanket, or anything of wool to wrap him in. If you do not in this way extinguish the fire, you will, at least, lessen the chances of the chest being burned and the flames being inhaled.

How Burns Should be Treated.

Great care must be taken in removing the clothes not to pull off the surface of the skin, which will seriously increase the danger.

Olive oil, that is not rancid, may be poured over the burns,—linseed oil, if at hand, is better—and fresh lard may be used if oil cannot be had immediately. Fine wheat flour should then be dusted over the oiled surface. The layer of flour should be quite thick and should extend beyond the burned surface. Over this again

should be placed a layer of fine cotton batting, which may be kept in place by very light bandaging. If the extremities are cold, put bottles of hot water around the feet, and in case of extreme prostration, hot brandy and water, wine whey, or milk punch may be given freely until the doctor arrives. Scalds may be treated in the same manner.

Attention must be given to the secretions, which must be kept free. Any symptom which indicates inflammation of the head, chest, or abdomen must be noted carefully and reported to the doctor; and opiates, or whatever ordered, must be carefully given, while the strength is kept up with nutritious food.

Sunstroke.

This is an accident occasionally met with in our climate, but which is only found occurring in its severity in tropical countries. It may be described as an affection of the nervous system resulting from exposure for a length of time to heat of unusual severity. A person may sometimes fall down affected in a similar manner in an assembly where the atmosphere is rendered hot and impure by overcrowding. Intemperate habits, or a constitution debilitated by previous

disease, render the individual more liable to this affection. So also do prolonged marches. When a person is attacked he becomes dizzy, and feels unable to support himself upon his legs. He complains of great thirst and experiences great difficulty in breathing. The face becomes red and the head feels hot and burning. When the temperature of the body sinks and the skin becomes cool and moist the danger begins to pass away. The first thing to be done when a person is thus seized is to remove him at once to a cool place, and so far as that is possible protect him from the light. The head should then be raised and water poured from a height upon it, or cloths steeped in iced water be applied to the head. Mustard should also be applied to the feet, the calves of the legs, and the chest, and so soon as the patient is able to swallow, some stimulant should be administered. A doctor should be called at once.

Poisons.

The many fatal accidents that are constantly happening from the swallowing of poisons, render it necessary to make mention of a few of the more common of these, along with their appropriate antidotes. The importance of acting with

promptitude in such cases need not be pressed upon my readers; while we hesitate, the poison is working, and unless something be done, and that without delay, a precious life may be sacrificed. Whenever a poisonous substance has been taken in ignorance or carelessness, or been administered to some one inadvertently, it is well when there exists any doubt as to the true nature of the poison that has been taken, to administer an emetic as soon as possible. The best and most speedy emetic to give is sulphate of zinc. Of this twenty grains should be given, and be followed at intervals by draughts of tepid water so as to accelerate vomiting. As, however, the druggist is not always close at hand, and this substance may not be readily procurable otherwise, an emetic of mustard and water or salt and water, may be given, and vomiting hastened by warm drinks and tickling the fauces with the finger or a feather. Should the nature of the poison that has been taken be known, the appropriate antidotes should of course be had recourse to. A short list of a few of the more important poisons, with their antidotes, is appended.

Opium.

Opium, and its preparations, such as laudanum. In this case the first thing to do is to administer

an emetic of sulphate of zinc, so as to remove as much of the poison as possible from the stomach. After this has been done drinks of strong coffee should be administered, and every effort had recourse to in order to keep the patient awake. Walk him about, speak constantly to him, or employ flagellation, if need be; anything, in fact, to counteract the effect of the opiate.

Acids.

Should the poison be of the nature of an acid, as sulphuric acid (oil of vitriol), oxalic acid and the like, the proper treatment is to administer alkaline remedies as speedily as possible. Of these, lime water, chalk, magnesia or soap-suds may be administered.

Alkalies.

Alkalies, such as caustic potash, when taken in poisonous dose, call for an opposite line of treatment. In this case vinegar and water should be given, or citric acid, lemon-juice, oranges, and the like.

Arsenic.

When arsenic has been taken the proper treatment is to administer an emetic, if vomiting has not been caused, and then give light magnesia, demulcent drinks, oil, and lime water.

CHAPTER XXIII.

MANAGEMENT OF HEALTH IN OLD AGE.

THE period of the decline in human life, which we term "old age," not being of necessity a time of disease, it may appear somewhat out of place to speak of the management of the health in old age in a treatise on sick-nursing; and yet the diminished vital power which characterizes this period of life, the state of second childhood which results, and the greater care which is absolutely necessary to maintain the body in a healthy condition, render it a fit subject to find a place in a work of this description. Old age steals upon us. We cannot avert it, for its approach is certain. To some it comes sooner, to others later, but alike to all. There are many things, however, which exert a powerful influence in diminishing the period of human existence, such as excess in eating and drinking, and mental worry and excitement; and as these are within our control, we can do much to avoid them, and so lengthen out the natural period of our life; but when we have thus done old age will creep upon us, and from its cold and withering grasp none can escape. The reason why

we cannot escape from the encroachments of old age is that it is a necessary consequence of life itself. It is the result of living, just as decay and death are the natural results of the growth and development of every flower.

It may assist us in our treatment of this subject if we inquire into the effects that are produced upon the body by the processes of combustion which are constantly going on within it, and by which life is maintained. First of all, then, the juices of the body become gradually diminished; they are less in amount than they formerly were; and as in any piece of machinery, when the quantity of oil necessary to the perfect and easy performance of its functions, is lessened, the whole moves stiffly, and is unable to perform its work so well—in like manner with the drying up of the various tissues of the body, which is a necessary consequence of this diminution of the natural juices, the former tone and vigor of the tissues is lost, and they are unable to perform their functions with that ease and harmony that they once could. Throughout the body, also, a deposition of earthy matter occurs as old age approaches. This is well seen in the case of the cartilages of the ribs, which in old age are generally transformed into true bone.

The same change is also well seen in the vascular system, many of the vessels becoming, owing to the deposition of earthy matter in their substance, little more than hard and rigid tubes. The elasticity which they formerly possessed is lost, and with it their power of yielding when the blood is propelled into them by the heart, and hence the danger of apoplexy in those who are up in years. In addition to these changes, the various structures throughout the body undergo diminution in size. They shrink, and in consequence lose their power. This is well seen in the case of the muscular structures, which become diminished in size and less vigorous. The brain also participates in these changes, and hence the loss of mental power so universally observable at this period of life.

Spring Time of Life.

Youth is the spring-time of life, when everything is fresh and vigorous. The juices of the body circulate freely, as the sap circulates through the various parts of the tree. The organs of the body are full of life and activity, even as the various organs of vegetable nature. It is the spring-tide of existence, and the hand of death has not yet marred the fair temple of the body. Then comes the period of manhood, the time of

full and complete vigor, the period of most perfect life, the summer of the human year. After this comes autumn, with its diminished activity, when the sap begins to circulate more feebly through the tree; the time of decay in the human body, when the tissues are less full of life and the various organs lose their vigor; when earthy matter becomes deposited throughout the living frame, and life is waning. Following quickly upon the heels of autumn comes the winter of life, the period of cessation of vital activity, the night of death. The gradual deposition and mingling of the earthy particles in old age with the various tissues of the body, by which they are slowly but surely deprived of their vitality, show that the dissolution of the body cannot be far off. The conditions of life are such that we commence dying the moment we begin to live. The processes necessary to life are those of combustion, by which the tissues of the body are constantly being destroyed and as constantly being built up again; and so long as the renewal of matter is able to supply the place of that which is destroyed, so long are the necessary laws of vitality fulfilled, and life remains intact. So soon, however, as there is any discrepancy between the one and the

other, so soon as the equilibrium is lost, so soon does physical death begin to lay hold of us.

No Escaping Old Age.

Seeing, then, that there is no escape from old age, that it will come upon the individual sooner or later, the question naturally suggests itself to the mind, "Can anything be done to hasten or retard its approach?" To this the answer must be given that there is undoubtedly much left for each one of us to do in this respect. By neglecting the ordinary laws of health, and acting contrary to the dictates of nature, the juices of our body may be wasted, and a premature old age brought about. Again, by carefully obeying those laws which we know to be productive of health, by carefully avoiding what we know to be productive of disease, or to be wasting and exhausting to the tissues, we can do much to ward off the approach of old age, and keep distant the period of dissolution.

Old Age at Twenty-five.

A celebrated writer has spoken of one dying of old age at twenty-five. Now, however ludicrous this may appear, there are undoubtedly many who, at this early age, in our large cities, begin to manifest the unmistakable signs of old age, such as stiffness of joints, tremulousness of voice, gray

hairs, loss of memory, etc. The habits of life at the present day in our large centres of civilization have done much to put us in the condition of those who inhabit tropical climates. With us the approach of old age ought to be greatly more retarded than with those who inhabit the warm countries, because there perfection is sooner attained. But in many of our large towns our youth are put, as it were, into the atmosphere of a forcing-house, and so brought into a similar condition with those of more tropical regions.

Instead of being of slow growth, and taking long to come to perfection, they are brought under influences which hasten those developmental changes which bring about manhood or womanhood, and by physical excesses, irregular lives, novel-reading of an over-stimulating kind, abuse of alcoholic liquors, and such like, the approach of old age is greatly hastened.

Vital Power.

In old age the individual is possessed of a much smaller provision of the vital power than when he was younger, and there is much less capacity for restoration then than formerly. Should we be so foolish, then, as to attempt to live when it is stealing upon us as we did when our store of vital power was much greater, and our capacity for

restoration much more perfect, we shall exert such a drain upon the system as will rapidly exhaust the vital power that is left, and with the diminished powers of restoration which we possess, the only result that can happen is that life will be shortened. In old age much of the irritability of youth is lost, and that frequently tempestuous period of life gives place to a season of greater tranquillity and enjoyment. Irritation, both from within and from without, is lessened in its effects upon the body owing to the diminution in the natural irritability and sensibility which has taken place, and as a consequence of this, there is less exertion and wasting of the powers. This diminished state of irritability in old age is very beneficial to the individual, inasmuch as it preserves him from many pernicious influences—such as the sway of passion, which in its effects is blunted—and the individual escapes much of the harm he otherwise would have run had he been younger.

Vital Processes.

The vital processes which are constantly taking place in the body are less active as old age comes on. They have lost much of their former intensity; but this very falling off, or diminution in the intensity of the vital processes, is of a beneficial kind, inasmuch as it enables life to go

on for a longer time than it could otherwise do, were the vital forces still in full energy. Old age being likewise free from the impetuosity of youth, and a state of mind more calm and equable being established, it is exempt from many of the diseases to which the other is liable. The habit of living also may be cited as exerting an influence in this direction, for it is astonishing to observe how, when the mind has become a mere blank, and the spiritual part of the man appears dead, the merely vegetable part continues to live. As old age might be prolonged and the life of the individual lengthened in many instances were only those rules obeyed which nature indicates, we purpose, following the indications of nature, to throw out a few hints which may be of service in enabling the aged to live more happily, and prolong the period of their existence.

Clothing.

In old age, owing to the vital processes going on within the body being less, the power of generating heat is less, and the temperature of the body sinks. To compensate for this the clothing should be warm, but as far as possible warmth should be combined with lightness, as heavy articles of clothing are apt to be a burden to the aged. Therefore the articles best suited to this

period of life are those which are made of flannel, this material combining warmth with lightness, retaining heat, and preventing the entrance of cold in a way that no other article of clothing does. In a climate like ours, where there is incessant change in the weather, and where the body is almost daily subjected to great variation of temperature, nothing with which we are acquainted can enable the individual to stand these changes half so well as flannel. It should, therefore, always constitute a very important element of dress in those who are up in years.

Atmospheric Changes.

As the atmospheric changes in our climate are so very trying to those who are advanced in life, and frequently lead to disease and death, it would greatly conduce to the prolongation of life if those who had it in their power were to remove to some milder climate. Of course it is only very few at most who can do this; the majority must remain where they are, and endeavor to withstand these climatic changes as they best can. Much may, however, be done to prevent those who are obliged to remain here feeling those changes. Thus, the apartments occupied by the aged should be kept warm, and

the temperature be maintained as equable as possible.

Food for the Aged.

The food taken by the aged ought to combine two qualities in an eminent degree. First, it ought to be very nourishing, and second, it ought to be easy of digestion. The necessity for relieving the stomach of as much work as possible will be readily apparent from what has been already said. The two qualities of great nourishment and easy digestion will be found in greatest perfection in such food as is more or less fluid. Strong soups, beef-tea, raw eggs, or eggs lightly boiled, will be found to answer well. Light puddings, chicken, and the like, will be found suitable articles of diet, being both nourishing and easy of digestion. Roast beef, if tender, may also be partaken, but should be so sparingly, as butcher's meat of all kinds requires a considerable amount more of active exercise than other kinds of food in order to effect its thorough digestion. All heavy articles of diet must be avoided. Of this nature are all pastry-stuffs, made dishes, and the like. Great care should thus be exercised in the selection of suitable articles of food, and as the stomach, participating in those changes which are taking place throughout the body, is unable

to digest so large quantities as formerly, the amount given at one time must be diminished, and we must endeavor to convey a greater amount of nourishment into the system in a less bulky form.

Teachings of Experience.

It may be noticed here that some people have found through experience that certain articles of diet which to the many prove indigestible, agree with them. In such cases it would be unwise to prohibit their use of these things. The man who during the periods of youth and adult life has paid any attention to what he has eaten, will be the best judge of what is likely to agree or disagree with him, and should be guided accordingly. He who knows from past experience that a certain article of food will disagree with him, but takes it merely for the gratification of his palate, acts foolishly, and must bear the consequences. Cornaro, in his celebrated treatise on health, speaking on this subject, says that he set about, after recovering from a severe illness, to try the truth of the proverb which says that "Whatever pleases the palate, must agree with the stomach and nourish the body." The result of the trial was to prove that the proverb was false, "for though," he says,

"rough and very cold wines, as likewise melons and other fruits, salad, fish, pork, tarts, garden-stuff, pastry, and the like, were very pleasing to my palate, they disagreed with my stomach."

Let each person then find out, by careful attention to this matter, those articles of diet which best agree with him, and let him be guided accordingly. Don't overload the stomach, and never allow yourself to be thoroughly satiated. The sign that a man's stomach is acting well, is that he is never conscious of its existence. The moment that a person becomes aware that he or she is possessed of a stomach at all, depend upon it something is wrong.

If the aged indulge in heavy meals, they will soon be conscious of feelings of uneasiness in the region of the stomach, which are so many warnings that all is not right; and unless the diet be seen to, and its errors corrected, the uneasiness may increase, and the headache and furred tongue and nausea which succeed will show the individual to be suffering from a smart attack of indigestion. It is surely wiser, therefore, to abstain from overloading the stomach than to produce so much wretchedness and misery merely for the sake of gratifying the palate.

Old Maxim.

The old maxim, "Live not to eat, but eat to live," requires to be frequently repeated in these days, when cookery has attained to such perfection, and when the palate is so largely appealed to by the multifarious dishes that appear upon our tables.

Variety is undoubtedly good, and saves the palling of articles upon one, but when the palate is so extensively catered for, the individual is apt to partake too freely, and the stomach suffers in consequence. Moderation in eating must constantly be kept in mind by the aged as necessary to the maintenance of health. There can be no doubt that many people eat far more than is really required to sustain life, and keep them in perfect health. The result of this is that the various organs are overtaxed, and a state of disease is brought about. It is not the amount that is eaten which benefits the system, but that which is assimilated and goes to build up the tissues of the body; the rest only tends to clog the machinery and impede the harmonious working of its individual parts. The aged have need to remember this, as by neglect to do so, owing to the impaired vitality of the organs they may bring upon themselves a serious attack of disease.

Stimulants.

The question as to the utility of stimulants in old age, naturally presents itself for our consideration in this connection. Ought spirituous liquors to form a part of the dietary of the aged? Does their use, in what is called moderation, tend to prolong life? While not denying the fact that many who have employed alcoholic drinks, moderately, have attained to old age, there can be no doubt that many who have been total abstainers have lived to a great age, and that the longest period of human existence is perfectly compatible with complete abstinence from intoxicating liquors. The best beverage is undoubtedly water, and they who use nothing else are more likely to attain to a ripe old age than if they had used alcohol in any of its various forms. While this is true, it is also true that better health is likely to be enjoyed without, than with, the use of spirituous drinks. It may be true that wine gladdens the heart of man, but it must also never be forgotten that while it does so, it also produces serious tissue degeneration, and may very materially shorten the duration of life. The popular idea, that alcohol is necessary in the aged to promote heat, is one that is perfectly erro-

neous, inasmuch as the principal action of this agent is to lower, not to raise, the bodily temperature. Again, it is argued that in old age the circulation is feeble, and extra stimulus is necessary; but the state of the vascular system at this period of life must never be forgotten, and anything that causes the heart's work to be increased may be fraught with serious danger at this time. Therefore the period of old age will be more likely to be prolonged, and the health maintained longer in a state of soundness, without than with the use of alcoholic drinks in any form.

Exercise in Old Age.

Exercise is necessary in old age to keep the body in a sound state just as it is during the period of youth and adult life. Without it the skin and excretory organs cannot perform their functions aright, and the health must suffer in consequence. The exercise must not, however, be of a violent character. All violent exercise at this time is only calculated to do mischief. That which answers best is exercise of a passive nature, such as driving in a carriage. A walk taken leisurely, and not entailing any great physical effort, will also prove very beneficial, and so,

also, may mild horse-back exercise. All climbing of hills, and anything requiring great muscular effort, should, as a rule, be avoided.

Regular Habits.

Habits of regularity should now be attended to more than ever. Every meal should have its appointed time, which ought to be strictly adhered to. The hour for retiring to rest should be as seldom as possible interfered with, and the habit of sitting up late is to be avoided. Those who are up in years should retire to rest early. Sitting up in close and stuffy rooms—rooms overheated and badly ventilated—will be a fruitful source of mischief to the aged. No food should be taken an hour or so before retiring to rest, and the last meal of the day should always be light. Milk and bread, arrowroot and milk, and the like, will be found suitable articles of diet at this meal.

Baths.

During every period of life benefit is to be derived from the judicious employment of baths. In old age, the tepid bath is that which is most universally applicable. It should, therefore, be adopted in preference to all others. By the influence of baths the skin is kept healthy and act-

ing vigorously, and those who neglect to employ them deprive themselves of a source of much comfort and health-giving power.

Regulation of the Bowels.

Many people, when they get up in years, find the bowels rather sluggish. This may result in part from the diminution that has taken place in the daily amount of exercise. Frequently, when this is the case, harm is done by recourse being had to powerful purgative medicines. The attention should be first carefully directed to the diet, and any discoverable error at once corrected. Ripe fruit, taken at dinner time, stewed apples, prunes, and the like, will frequently serve to move the bowels, and when these suffice, all physic-taking should be avoided. Should it be found necessary to take aperients, only the mildest should be had recourse to.

Occupation.

It is of great importance in the management of the health in old age to have the mind pleasantly occupied. The company of children is always grateful to the aged, and seems to exert a healthful influence upon them. Among the ancients it was regarded as a means of prolonging life. The aged enter into the joy and happiness

of children in a remarkable degree, they enjoy their sports and take part in their games with great heartiness, and this ought always to be encouraged.

Pleasure in Old Age.

It is quite a foolish notion that the period of old age is one not to be desired, that it is a time of much weariness both of mind and body, and devoid of all enjoyment. If attention has been paid to the health during youth and adult life, so that old age is reached in comparative strength and vigor, there will be much enjoyment in these latter years of life. The consciousness of a life well spent is a fruitful source of comfort, and the power of advising those who are younger from the vast experience of a lifetime may be fraught with much good.

To show how much pleasure there may be in store for those who are advanced in years, and how well worth the while it is for every one to strive to reach it, we may quote from Cornaro. At the age of eighty-three, in his "Treatise on a Sober Life," he speaks of the good state of health he enjoys; how he is able to mount his horse without assistance or advantage of situation; how he can not only ascend a single flight of stairs, but climb up hill from bottom to top afoot and

with the greatest ease and unconcern, and then adds: "How gay, pleasant, and good-humored I am; how free from every perturbation of mind, and every disagreeable thought!" Speaking of the manner in which he passes his time, he says: "I can contrive to spend every hour of it with the greatest delight and pleasure, having frequent opportunities of conversing with many honorable gentlemen valuable for their good sense and manners, their acquaintance with letters and every other good quality. Then, when I cannot enjoy their conversation, I betake myself to the reading of some good book. When I have read as much as I like, I write, endeavoring in this, as in everything else, to be of service to others to the utmost of my power." He also speaks of the pleasure his gardens and the streams that run through them afford; how much enjoyment he derives from the improvements that are being carried on by the State—drainage and public buildings. Also of the pleasure it gives him to come home and find his grandchildren round about him, and the happiness of mingling with them in their sports. This brief notice of the manner in which this remarkable man passed his time at the present advanced age of eighty-three, shows us how much happiness and pleasure old age is capable of.

CHAPTER XXIV.

FIRST WORDS ON INFANCY.

IN the preparation of this department it has been our object to give you the fruits of the experience of the most eminent men of the medical profession, in the clearest manner possible, and in the simplest language at our command, freed from all technicalities. It will be our endeavor to guide you in the management of the health of your offspring—to describe to you the symptoms of disease in infants and ward off approaching danger in order that you may take the necessary steps before disease has gained too firm a foothold. We will also endeavor to give you the treatment on the moment of some of their more passing ills when medical aid cannot quickly be procured, and when delay may prove death! We will use our best energy to banish injurious practice from the nursery, and strive to make the medical man's task more agreeable to himself and more beneficial to the patient.

We deem it every mother's imperative duty to study well these subjects. The proper manage-

ment of children—very young children especially – is a vital question—a mother's question, and the most important that can be brought under the consideration of the parent. How much this has been *neglected!*

How many mothers are called upon to care for these little helpless creatures and do not know the first thing about what should be done. They go on thinking that instinct or affection will guide them aright; but they soon find themselves in mid-ocean, without compass or chart, and the little mounds in the church-yard tell the story.

We are not overstraining the importance of this subject when we say that the child—the baby—is the most valuable treasure in this world; that "he is the precious gift of God;" that he is the source of the mother's greatest and purest enjoyment.

If in these pages we have accomplished any of these objects, we shall be amply repaid by the pleasing satisfaction that we have been of some little service to the rising generation.

CHAPTER XXV.

ABLUTION.

IT is not an uncommon plan to use *cold* water from the first, under the impression of its strengthening the child. This appears to be a cruel and barbarous practice, and is likely to have a contrary tendency. Moreover, it frequently produces either inflammation of the eyes, or stuffing of the nose, or inflammation of the lungs, or looseness of the bowels. Although we do not approve of *cold* water, we ought not to run into an opposite extreme, as *hot* water would weaken and enervate the babe, and thus would predispose him to disease. Lukewarm *rain* water will be the best to wash him with. This, if it is summer, should have its temperature gradually lowered, until it is quite cold; if it is winter, a *dash* of warm water ought still to be added, to take off the chill.

It will be necessary to use soap. Pears' unscented soap is the *best* for this purpose, as it is pure and less irritating to the skin than any other soap. (In fact there is no soap so good for the nursery as this. Many common cheap soaps are actually injurious to the skin.) Care should be

taken that it does not get into the eyes, as it may produce either inflammation or smarting of those organs.

Flannel or Sponge.

A piece of flannel is, for the first part of the washing, very useful—that is to say, to use with the soap, and to loosen the dirt and the perspiration; but for the finishing-up process, a sponge—a large sponge—is superior to flannel, to wash all away, and to complete the bathing. A sponge cleanses and gets into all the nooks, corners and crevices of the skin. Besides, sponge, to finish up with, is softer and more agreeable to the tender skin of a babe than flannel. Moreover, a sponge holds more water than flannel, and thus enables you to stream the water more effectually over him. A large sponge will act like a miniature shower bath, and will thus brace and strengthen him.

How He Should be Washed.

A babe ought, every morning of his life, to be thorougly washed from head to foot; and this can only be properly done by putting him bodily either into a tub or into a bath, or into a large nursery-basin, half-filled with water. The head, before placing him in the bath, should be first

wet (but not dried); then immediately put him into the water, and, with a piece of flannel well soaked, cleanse his whole body, particularly his arm-pits, between his thighs, his groins, and his hams; then take a large sponge in hand, and allow the water from it, well filled, to stream all over the body, particularly over his back and loins. Let this advice be well observed, and you will find the plan most strengthening to your child. The skin must, after every bath, be thoroughly but quickly dried with warm, dry, soft towels, first enveloping the child in one, and then gently absorbing the moisture with the towel, not roughly scrubbing and rubbing his tender skin as though a horse were being rubbed down.

The ears must, after each ablution, be carefully and well dried with a soft dry napkin; inattention to this advice has sometimes caused a gathering in the ear—a painful and distressing complaint; and at other times it has produced deafness.

Directly after the infant is dried, all the parts that are at all likely to be chafed ought to be well powdered. After he is well dried and powdered, the chest, the back, the bowels, and the limbs should be gently rubbed, taking care not

to expose him unnecessarily during such friction.

He ought to be partially washed every evening; indeed it may be necessary to use a sponge and a little warm water frequently during the day, namely, each time after the bowels have been relieved. *Cleanliness is one of the grand incentives to health*, and therefore cannot be too strongly insisted upon. If more attention were paid to this subject, children would be more exempt from chafings, "breakings-out," and consequent suffering, than they at present are. After the second month, if the babe be delicate, the addition of a handful of table-salt to the water he is washed with in the morning will tend to brace and strengthen him.

With regard to the best powder to dust an infant with, there is nothing better for general use than starch—corn starch is the best; or violet powder, which is nothing more than finely powdered starch scented, and which may be procured of any respectable druggist. Some mothers are in the habit of using white lead; but as this is poison, it ought *on no account* to be resorted to.

Excoriation about the Groins or Fundament.

After sponging the parts with tepid *rain* water, holding him over his tub, and allowing the water

from a well-filled sponge to stream over the parts, and then drying them with a soft napkin (not rubbing, but gently dabbing with the napkin), there is nothing better than dusting the parts frequently with finely powdered native carbonate of zinc-calamine powder. The best way of using this powder is, tying up a little of it in a piece of muslin, and then gently dabbing the parts with it.

Remember, excoriations are generally owing to the want of water—to the want of an abundance of water. An infant who is every morning well bathed, seldom suffers either from excoriations or from any other of the numerous skin diseases. Cleanliness, then, is the grand preventive of, and the best remedy for excoriations. Naaman the Syrian was ordered "to wash and be clean," and he was healed, "and his flesh came again like unto the flesh of a little child, and he was clean." This was, of course, a miracle; but how often does water, without any special intervention, act miraculously both in preventing and in curing skin diseases.

An infant's clothes, napkins especially, ought never to be washed with soda; the washing of napkins with soda is apt to produce excoriations and breakings-out. As washerwomen often deny

that they use soda, it can be easily detected by simply soaking a clean white napkin in fresh water and then tasting the water; if it be brackish and salt, soda has been employed.

Further Advice in regard to Bathing an Infant.

Let the baby by all means, then, as soon as the navel-string has separated from the body, be bathed either *in* his tub, or *in* his bath, or *in* his large nursery-basin; for if he is to be strong and hearty, *in* the water every morning he must go. The water ought to be slightly warmer than new milk. It is dangerous for him to remain for a long period in his bath; this, of course, holds good in a tenfold degree if the child have either a cold or pain in his bowels. Take care that, immediately after he comes out of his tub, he is well dried with warm towels. It is well to let him have his bath the first thing in the morning, and before he has been put to the breast; let him be washed before he has his breakfast—it will refresh him and give him an appetite. Besides, he ought to have his morning ablution on an empty stomach, or it may interfere with digestion, and might produce sickness and pain. In putting him in his tub, let his head be the first part washed. We all know.

that in bathing in the sea, how much better we can bear the water if we first wet our head; if we do not do so, we shiver and feel chilled and miserable. Let there be little or no lingering about the washing; let it be quickly over. When he is thoroughly dried with warm *dry* towels, let him be well rubbed with the warm hand of the mother or nurse. As we previously recommended, while drying him and while rubbing him, let him repose and kick and stretch either on the warm flannel apron, or else on a small blanket placed on the lap. One bathing in the tub, and that in the morning, is sufficient, and better than night and morning. During the day, as before observed, he may, after the action either of his bowels or of his bladder, require several spongings of lukewarm water, for *cleanliness is a grand incentive to health*, and also to comeliness.

Remember that it is absolutely necessary to every child, from his earliest babyhood, to have a bath, to be immersed every morning of his life in the water. This advice, unless in cases of severe illness, admits of no exception. Water to the body—to the whole body—is a necessity of life, of health, and of happiness; it wards off disease, it braces the nerves, it hardens the

frame, it is the finest tonic in the world. Oh, if every mother would follow to the very letter this counsel, how much misery, how much ill-health might then be averted!

CHAPTER XXVI.

MANAGEMENT OF THE NAVEL.

THERE is nothing better for wrapping up the navel-string than a piece of fine old linen, *unsinged;* when singed it frequently irritates the infant's skin.

Take a piece about three inches wide and four inches long, and wrap it neatly round the navel-string, in the same manner you would around a cut finger, and then, to keep on the rag, tie it with a few rounds of linen thread. The navel-string thus covered should, pointing upwards, be placed on the stomach of the child, and must be secured in its place by means of a flannel belly-band.

Bleeding of Navel-String.

Should the navel-string commence bleeding, in the absence of the doctor, the nurse or attendant ought immediately to take off the rag, and tightly, with a ligature composed of four or five

linen threads, retie the navel-string; and to make assurance doubly sure, after once tying it, she should pass the threads a second time around the navel-string, and tie it again; and after carefully ascertaining that it no longer bleeds, fasten it up in the rag as before. Bleeding of the navel-string rarely occurs, yet, if it should do so—the medical man not being at hand—the child's after-health, or even his life, may, if the above directions be not adopted, be endangered.

Navel-String Separate from Child.

This separation usually takes place in five days or a week after the birth of the child. In *some* cases, not for two or even three weeks, but they are rare. Nothing, however, should be done to hasten the separation. It should always be allowed to drop off, which when ready, it will always do. Meddling with the navel-string has frequently caused the baby a great deal of suffering, and in some cases, even his life.

Should the navel become a little sore after the navel-string comes, spread a little mutton tallow on lint, and apply it every morning to the part affected, and a bread and water poultice every night, until it is quite healed.

CHAPTER XXVII.

RUPTURES—NAVEL.

A RUPTURE of the navel is sometimes occasioned by a meddlesome nurse. She is very anxious to cause the navel-string to separate from the infant's body, more especially when it is longer in coming away than usual. She, therefore, before it is in a fit state to drop off, forces it away. The rupture, at another time, is occasioned by the child incessantly crying. A mother, then, should always bear in mind that a rupture of the navel is often caused by much crying, and that it occasions much crying; indeed it is a frequent cause of incessant crying. A child, therefore, who, without any assignable cause, is constantly crying, should have his navel carefully examined.

A rupture of the navel ought always to be treated early—the earlier the better. Ruptures of the navel can only be *cured* in infancy and in childhood. If it be allowed to run on until adult age, a *cure* is impossible. Palliative means can then only be adopted.

When such ruptures occur, it is always best to send for your physician, as he will know, from

the nature of the case, what is the best treatment to be adopted.

Groin Ruptures.

These demand immediate and proper attention. Upon consulting with your physician, he will supply you with a well fitting truss, *which will eventually cure.* If the truss be properly made (under the direction of an experienced surgeon) by a skillful surgical-instrument maker, a beautiful, nicely-fitting truss will be supplied, which will take the proper and exact curve of the lower part of the infant's belly, and will thus keep on without using any under-strap whatever—a great desideratum, as these under-straps are so constantly being wet and soiled as to endanger the patient constantly catching cold. But if this under-strap is to be superseded, the truss must be made exactly to fit the child—to fit him like a ribbon; which is a difficult thing to accomplish unless it be fashioned by a skillful workman. It is only lately that these trusses have been made without under-straps—formerly the under-straps were indispensable.

These groin ruptures require great attention and supervision, as the rupture (the bowel) must, before putting on the truss, be cautiously and thoroughly returned to its place, and much care

should be used to prevent the chafing and galling of the tender skin of the babe, which an ill-fitting truss would be sure to occasion. But if care and skill be bestowed on the case, a perfect cure might in due time be ensured. The truss must not be discontinued until a *perfect* cure be effected.

Let us strongly urge you to see that our advice is carried out to the very letter, as a groin rupture can only be *cured* in infancy and in childhood. If it be allowed to run on, unattended to, until adult age, he will be obliged to wear a truss *all his life*, which would be a great annoyance and a perpetual irritation to him.

CHAPTER XXVIII.

CLOTHING.

THE subject of clothing for infants is one of great importance, and should be carefully considered both by parents and nurses. Many of the old customs are being done away with, such as flannel caps, etc., and good is resulting from it. There are many things of which we wish to speak, and we will take first the

Belly-Band.

This should be of flannel, for two reasons—first, on account of its keeping the child's bowels comfortably warm; and secondly, because of its not chilling him (and thus endangering cold, etc.), when he wets himself. The belly-band ought to be moderately, but not tightly applied, as, if tightly applied, it would interfere with the necessary movement of the bowels.

It can be discontinued when the child is two or three months old. The best way of leaving it off is to tear a strip off daily for a few mornings, and then to leave it off altogether. Nurses who take charge of an infant when the monthly nurse leaves, are frequently in the habit of at

once leaving off the belly-band, which often leads to ruptures when the child cries or strains. It is far wiser to retain it too long than too short a time; and when a child catches whooping-cough, or has bowel trouble whilst still very young, it is safer to resume the belly band.

A babe's clothing ought to be light, warm, loose, and free from pins.

It should be light, without being too airy. Many infant's clothes are both too long and too cumbersome. It is really painful to see how some poor little babies are weighed down with a weight of clothes. They may be said to "bear the burden," and that a heavy one, from the very commencement of their lives! How absurd, too, the practice of making them wear *long* clothes. Clothes to cover a child's feet, and even a little beyond, may be desirable; but for clothes, when the infant is carried about, to reach to the ground, is foolish and cruel in the extreme. We have seen a delicate baby almost ready to faint under the infliction.

It should be warm, without being too warm. The parts that ought to be kept warm are the chest, the bowels and the feet. If the infant be delicate, especially if he be subject to inflammation of the lungs, he ought to wear a fine

flannel, instead of his usual shirts, which should be changed as frequently.

The dress should be loose, so as to prevent any pressure upon the blood-vessels, which would otherwise impede the circulation, and thus hinder a proper development of the parts. It ought to be loose about the chest and waist, so that the lungs and the heart may have free play. It should be loose about the stomach, so that digestion may not be impeded; it ought to be loose about the bowels, in order that the spiral motion of the intestines may not be interfered with—hence the importance of putting on a belly-band moderately slack; it should be loose about the sleeves, so that the blood may course, without let or hindrance, through the arteries and veins; it ought to be loose, then, everywhere, for nature delights in freedom from restraint, and will resent, sooner or later, any interference. Oh, that a mother would take common sense, and not custom, as her guide!

As few pins should be used in the dressing of a baby as possible. Inattention to this advice has caused many a little sufferer to be thrown into convulsions.

The most careful mothers use no pins in the dressing of their children; they tack every part

that requires fastening, with a needle and thread. They do not even use pins to fasten the baby's diapers. They make the diapers with loops and tapes, and thus altogether supersede the use of pins in the dressing of an infant. The plan is a good one, takes very little extra time, and deserves to be universally adopted. If pins be used for the diapers, they ought to be the patent safety pins.

Airing Infants' Clothes.

A nurse cannot be too particular on this head. A babe's clothes should be well aired the day before they are put on, as they should *not* be put on warm from the fire. It is well, where it can be done, to let him have clean clothes daily. Where this cannot be afforded, the clothes, as soon as they are taken off at night, should be well aired, so as to free them from the perspiration, and that they may be ready to put on the following morning. It is truly nonsensical to endeavor to harden a child, or anyone else, by putting on damp clothes!

Winter or Outdoor Clothes.

Be sure that he is well wrapped up. He ought to have under his cloak a knitted worsted jacket, which should button behind; and if the weather

be very cold, a shawl over all; and, provided it is dry above, and the wind be not too strong, he may then brave the weather. He will then come from his walk refreshed and strengthened, for cold air is an invigorating tonic. In a subsequent chapter, we will indicate the proper age at which a child should be first sent out to take exercise in the open air.

When to Put On Short Clothes.

This, of course, will depend upon the season. In the summer, the right time for "shortening a babe," as it is called, is at the end of three months; in the winter, at the end of five months. But if the right time for "shortening" a child should happen to be in the spring, let it be deferred until the end of May. The springs are very trying and treacherous; and sometimes in April the weather is almost as cold, and the wind as biting, as in winter. It is treacherous, for the sun is hot, and the wind, which is at this time of the year frequently easterly, is keen and cutting. It is far preferable to "shorten" a child in the winter than in early spring.

CHAPTER XXIX.

DIET.

THERE has been much said about when a child should be put to the breast, but the best authority now claims that the infant should be put to the breast soon after birth: the interest, both of the mother and of the child, demands it. It will be advisable to wait three or four hours, that the mother may recover from her fatigue, and then the baby must be put to the breast. If this be done, he will generally take the nipple with avidity.

It might be said, at so early a period, that there is no milk in the breast; but such is not usually the case. There generally is a *little* from the very beginning, which acts on the baby's bowels like a dose of purgative medicine, and appears to be intended by nature to cleanse the system. But, provided there be no milk at first, the very act of suckling not only gives the child a notion, but, at the same time, causes a draught (as it is usually called) in the breast, and enables the milk to flow easily.

Of course, if there be *no* milk in the breast —the baby having been applied once or twice

to determine the fact—then you must wait for a few hours before applying him again to the nipple; that is to say, until the milk be secreted.

An infant, who for two or three days is kept from the breast, and who is fed upon gruel, generally becomes feeble, and frequently, at the end of that time, will not take the nipple at all. Besides, there is a thick creamy substance which, if not drawn out by the child, may cause inflammation and gathering of the breast, and consequently, great suffering to the mother. Moreover, placing him early to the breast, moderates the severity of the mother's after-pains, and lessens the risk of her flooding. A new-born babe must *not* have gruel given to him, as it disorders the bowels, causes a disinclination to suck, and thus makes him feeble.

Tongue-Tied.

If an infant shows any disinclination to suck, or if he appears unable to apply his tongue to the nipple, immediately call the attention of the medical man to the fact, in order that he may ascertain whether he be tongue-tied. If he be, the simple operation of dividing the bridle of the tongue will remedy the defect, and will cause him to take the nipple with ease and comfort.

Provided there be not Milk at first.

Wait with patience; the child (if the mother have no milk) will not, for at least twelve hours, require artificial food. In the generality of instances, then, artificial food is not at all necessary; but if it should be needed, warm water, slightly sweetened with loaf sugar (or with brown sugar, if the babe's bowels have not opened), should be given, in small quantities at a time, every four hours, until the milk be secreted, and then it must be discontinued. The infant ought to be put to the nipple every four hours, but not oftener, until he be able to find nourishment.

If, after the application of the child for a few times, he is unable to find nourishment, then it will be necessary to wait until the milk be secreted. As soon as it is secreted, he must be applied with great regularity, alternately to each breast.

We say *alternately* to each breast. This is most important advice. Sometimes a child, from some inexplicable reason, prefers one breast to the other, and the mother, to save a little contention, concedes the point, and allows him to have his own way. And what is frequently the consequence?—a gathered breast!

We frequently hear of a babe having no notion of sucking. This "no notion" may generally be

traced to bad management, to stuffing him with food, and thus giving him a disinclination to take the nipple at all.

A mother generally suckles her baby too often, having him almost constantly at the breast. This practice is injurious both to parent and to child. The stomach requires repose as much as any other part of the body; and how can it have it if constantly loaded with breast-milk? For the first month, he ought to be suckled about every hour and a half; for the second month, every two hours—gradually increasing, as he becomes older, the distance of time between, until at length he has it about every four hours.

If a baby were suckled at stated periods, he would only look for the breast at those times, and be satisfied. A mother is frequently in the habit of giving the child the breast every time he cries, regardless of the cause. The cause too frequently is that he has been too often suckled—his stomach has been overloaded; the little fellow is consequently in pain, and he gives utterance to it by cries. How absurd is such a practice! We may as well endeavor to put out a fire by feeding it with fuel. An infant ought to be accustomed to regularity in

everything, in times for suckling, for sleeping, etc. No children thrive so well as those who are thus early taught.

Artificial Food.

Artificial food must not, for the first five or six months, be given, if the parent be moderately strong; of course, if she be feeble, a *little* food will be necessary. Many delicate women enjoy better health whilst suckling than at any other period of their lives.

It may be well, where artificial food, in addition to the mother's own milk, is needed, and before giving any farinaceous food whatever (for farinaceous food until a child is six or seven months old is injurious), to give, through a feeding bottle, every night and morning, in addition to the mother's breast of milk, the following milk-water-and-sugar-of-milk food:—

Fresh milk from ONE cow; warm water—of each a quarter of a pint; sugar-of-milk, one teaspoonful.

The sugar-of-milk should first be dissolved in warm water, and then the fresh milk *unboiled* should be mixed with it. The sweetening of the above food with sugar-of-milk, instead of with lump sugar, makes the food more to resemble

the mother's own milk. The infant will not, probably, at first take more than half of the above quantity at a time, even if it does so much as that; but still the above are the proper proportions; and as he grows older, he will require the whole of it at a meal.

The food that suits one infant will not agree with another.

(1.) The one that we have found the most generally useful, is made as follows:—Boil the crumb of bread for two hours in water, taking particular care that it does not burn; then add only a *little* lump-sugar (or brown sugar, if the bowels be costive), to make it palatable. When he is six or seven months old, mix a little new milk—the milk of ONE cow—with it gradually as he becomes older, increasing the quantity until it be nearly all milk, there being only enough water to boil the bread; the milk should be poured boiling hot on the bread. Sometimes the two milks—the mother's and the cow's milk—do not agree; when such is the case, let the milk be left out, both in this and in the foods following, and let the foods be made with water, instead of with milk and water. In other respects, until the child is weaned, let it be made as above directed; when he is weaned, good fresh

cow's milk MUST, as previously recommended, be used.

(2.) Or cut thin slices of bread into a basin, cover the bread with cold water, place it in an oven for two hours to bake; take it out, beat the bread up with a fork, and then slightly sweeten it. This is an excellent food.

(3.) Another good food is the following:—Take about a pound of flour, put it in a cloth, tie it up tightly, place it in a saucepanful of water, and let it boil for four or five hours; then take it out, peel off the outer rind, and the inside will be found quite dry, which grate.

(4.) Another way of preparing an infant's food, is to bake flour—biscuit flour—in a slow oven, until it be of a light fawn color. Baked flour ought, after it is baked, to be reduced, by means of of a rolling-pin, to a fine powder, and should then be kept in a covered tin, ready for use.

(5.) An excellent food for a baby is baked crumbs of bread. The manner of preparing it is as follows:—Crumb some bread on a plate; put it a little distance from the fire to dry. When dry, rub the crumbs in a mortar, and reduce them to a fine powder; then pass them through a sieve. Having done this, put the crumbs of bread into a slow oven, and let them bake

until they be of a light fawn color. A small quantity either of the boiled, or of the baked flour, or of the baked crumbs of bread, ought to be made into food, in the same way as gruel is made, and should then be slightly sweetened, according to the state of the bowels, either with lump or with brown sugar.

(6.) Baked flour sometimes produces constipation; when such is the case, a very prominent physician wisely recommends a mixture of baked flour and prepared oatmeal, in the proportion of two of the former and one of the latter. He says:—"To avoid the constipating effects, I have always had mixed, before baking, one part of prepared oatmeal with two parts of flour; this compound I have found both nourishing, and regulating to the bowels. One tablespoonful of it, mixed with a quarter of a pint of milk, or milk and water, when well boiled, flavored and sweetened with white sugar, produces a thick, nourishing and delicious food for infants or invalids." He goes on to remark:—"I know of no food, after repeated trials, that can be so strongly recommended by the profession to all mothers in the rearing of their infants, without or with the aid of the breasts—at the same time relieving them of much draining and dragging

whilst nursing with an insufficiency of milk—as baked flour and oatmeal."

(7.) Another is—the top crust of a baker's loaf, boiled for an hour in water, and then moderately sweetened with lump sugar. If, at any time, the child's bowels should be costive, *raw* must be substituted for *lump* sugar.

(8.) The following is a good and nourishing food for a baby:—Soak for an hour, some *best* rice in cold water; strain, and add fresh water to the rice; then let it simmer till it will pulp through a sieve; put the pulp and the water in a saucepan, with a lump or two of sugar, and again let it simmer for a quarter of an hour; a portion of this should be mixed with one-third of fresh milk, so as to make it of the consistence of good cream. This is an excellent food for weak bowels.

When the baby is six or seven months old, new milk should be added to any of the above articles of food, in a similar way to that recommended for boiled bread.

If a child's bowels be relaxed and weak, or if the motions be offensive, the milk *must* be boiled, but not otherwise. The following is a good food when an infant's bowels are weak and relaxed:

(9.) Into five large spoonfuls of the purest water rub smooth one dessertspoonful of fine flour. Set

over the fire five spoonfuls of new milk, and put two bits of sugar into it; the moment it boils, pour into it the flour and water, and stir it over a slow fire twenty minutes.

Where there is much emaciation, we have found genuine arrowroot a very valuable article of food for an infant, as it contains a great deal of starch, which starch helps to form fat and to evolve caloric (heat)—both of which a poor, emaciated, chilly child stands so much in need of.

(10.) It must be made with equal parts of water and of good, fresh milk, and ought to be slightly sweetened with loaf sugar; a small pinch of table salt should be added to it.

Arrowroot will not, as milk will, give bone and muscle; but it will give—what is very needful to a delicate child—fat and warmth. Arrowroot, as it is principally composed of starch, comes under the same category as cream, butter, sugar, oil and fat. Arrowroot, then, should always be given with new milk (mixed with one-half of water): it will then fulfill, to perfection, the exigencies of nourishing, of warming and fattening the child's body.

New milk, composed in due proportions as it is, of cream and of skim milk—the very acme of perfection—is the only food which of itself alone

will nourish and warm and fatten. It is, for a child, *par excellence*, the food of foods!

Arrowroot and all other farinaceous foods are, for a child, only supplemental to milk—new milk being, for the young, the staple food of all other kinds of foods whatever.

But bear in mind, *and let there be no mistake about it*, that farinaceous food, be it what it may, until the child be six or seven months old—until, indeed, he begin to cut his teeth—is *not* suitable for a child; until then, the milk-water-salt-and sugar food is usually, if he be a dry-nursed child, the best artificial food for him.

We have given you a large and well-tried infant's dietary to choose from, as it is sometimes difficult to fix on one that will suit; but, remember, if you find one of them to agree, keep to it, as a babe requires a simplicity in food—a child a greater variety.

Let us, in this place, insist upon the necessity of great care and attention being observed in the preparation of any of the foregoing articles of diet. A babe's stomach is very delicate, and will revolt at either ill-made, or lumpy, or burnt food. Great care ought to be observed as to the cleanliness of the cooking utensils. The directions given require the strict supervision of the mother.

Broths have been recommended, but, for our part, we think that, for a young infant, they are objectionable; they are apt to turn acid on the stomach, and to cause flatulence and sickness; they, sometimes, disorder the bowels and induce griping and purging.

Whatever artificial food is used, ought to be given by means of a bottle, and not only as it is a more natural way than any other of feeding a baby—as it causes him to suck as though he were drawing it from the mother's breasts—but as the act of sucking causes the salivary glands to press out their contents, which materially assist digestion. Moreover, it seems to satisfy and comfort him more than it otherwise would do.

The food ought to be of the consistence of good cream, and should be made fresh and fresh. It ought to be given milk-warm. Attention must be paid to the cleanliness of the vessel, and care should be taken that the milk be that of ONE cow, and that it be new and of good quality; for if not it will turn acid and sour, and disorder the stomach, and will thus cause either flatulence or looseness of the bowels, or perhaps convulsions. The only way to be sure of having it from the *one* cow, is (if you have not a cow of your own), to have the milk from a reliable cow-

keeper, and to have it brought to your house in a can of your own. The better plan is to have two cans, and to have the milk fresh and fresh every night and morning. The cans, after each time of using, ought to be scalded out; and, once a week, the can should be filled with cold water, and the water should be allowed to remain in it until the can be again required.

Very little sugar should be used in the food, as much sugar weakens the digestion. A small pinch of table salt ought to be added to whatever food is given, as "the best saviour is salt." Salt is most wholesome—it strengthens and assists digestion, prevents the formation of worms, and, in small quantities, may with advantage be given (if artificial food be used) to the youngest baby.

Artificial Food Whilst Suckling.

This should not be given oftener than twice during the twenty-four hours, and then only in small quantities at a time, as the stomach requires rest, and at the same time, can manage to digest a little food better than it can a great deal. Let us again urge upon you the importance, if it be at all practicable, of keeping the child *entirely* to the breast for the first five or six months of his existence. Remember there is

no *real* substitute for a mother's milk; there is no food so well adapted to his stomach; there is no diet equal to it in developing muscle, in making bone, or in producing that beautiful plump, rounded contour of the limbs; there is nothing like a mother's milk *alone* in making a child contented and happy, in laying the foundation of a healthy constitution, in preparing the body for a long life, in giving him tone to resist disease, or in causing him to cut his teeth easily and well; in short, *the mother's milk is the greatest temporal blessing an infant can possess.*

As a general rule, therefore, when a child and the mother are tolerably strong, he is better without artificial food until he have attained the age of three or four months; then it will be necessary to feed him with the milk-water-and sugar-of-milk food twice a day, so as gradually to prepare him to be weaned (if possible) at the end of nine months. The food mentioned in the foregoing pages will, when he is six or seven months old, be the best for him.

Mother Suckle Her Own Infant or Not?

It must first be ascertained, *beyond all doubt*, that a mother is not able to suckle her own child. Many delicate women do suckle their infants with advantage, not only to their offspring,

but to themselves. "I will maintain," says Steele, "that the mother grows stronger by it, and will have her health better than she would have otherwise. She will find it the greatest cure and preventive for the vapors (nervousness) and future miscarriages, much beyond any other remedy whatsoever. Her children will be like giants, whereas otherwise they are but living shadows, and like unripe fruit; and certainly if a woman is strong enough to bring forth a child, she is beyond all doubt strong enough to nurse it afterwards."

Many mothers are never so well as when they are nursing; besides, suckling prevents a woman from becoming pregnant so frequently as she otherwise would. This, if she be delicate, is an important consideration, and more especially if she be subject to miscarry. The effects of miscarriage are far more weakening than those of suckling.

A hireling, let her be ever so well inclined, can never have the affection and unceasing assiduity of a mother, and, therefore, cannot perform the duties of suckling with equal advantage to the baby.

The number of children who die under five years of age is enormous—many of them from

the want of the mother's milk. There is a regular "parental baby-slaughter"—"a massacre of the innocents"—constantly going on in America, in consequence of infants being thus deprived of their proper nutriment and just dues! The mortality from this cause is frightful, chiefly occurring among rich people who are either too grand, or, from luxury, too delicate to perform such duties; poor married women, as a rule, nurse their own children, and, in consequence, reap their reward.

If it be ascertained, past all doubt, that a mother cannot suckle her child, then, if the circumstances of the parents will allow—and they ought to strain a point to accomplish it—a healthy wet nurse should be procured, as, of course, the food which nature has supplied is far, very far superior to any invented by art. Never bring up a baby, then, if you can possibly avoid it, on artificial food. Remember, as we stated in a former page, there is in early infancy no *real* substitute for either a mother's or a wet nurse's milk. It is impossible to imitate the admirable and subtile chemistry of nature. The law of nature is, that a baby, for the first few months of his existence, shall be brought up by the breast; and nature's law cannot be broken with

impunity. It will be imperatively necessary, then -

"To give to nature what is nature's due."

Again, in case of a severe illness occurring during the first nine months of a child's life, what a comfort either the mother's or the wet-nurse's milk is to him—it often determines whether he shall live or die! But if a wet-nurse cannot fill the place of a mother, the next best substitute is goat's milk, which ought to be milked fresh when wanted, and should be given by means of a feeding-bottle.

If goat's milk cannot be procured, then the following milk-water-salt-and-sugar food, from the very commencement, should be given:—

New milk, the produce of ONE *healthy* cow; warm water; of each, equal parts; table salt, a few grains—a small pinch; lump sugar, a sufficient quantity to slightly sweeten it.

The milk itself ought not to be heated over the fire, but it should, as before stated, be warmed by the water; it must, morning and evening, be had fresh and fresh. The milk and water should be of the same temperature as the mother's milk, that is to say, at about ninety degrees Fahrenheit. It ought to be given by means of a feeding-bottle, and care must be taken to *scald* the bottle out twice a day, for if atten-

tion be not paid to this point, the delicate stomach of an infant is soon disordered. The milk should, as he grows older, be gradually increased, and the water decreased, until two-thirds of milk and one-third of water be used; but remember, that either *much* or *little* water must always be given with the milk.

The above is an old form, and one which has for many years been used with great success. Where it does not agree (and no food except a healthy mother's own milk does invariably agree), occasionally substitute sugar-of-milk for the lump sugar, in the proportion of a tea-spoonful of sugar-of-milk to every half-pint of food.

If your child should bring up his food, and if the ejected matter be sour-smelling, we should advise you to leave out the sugar-of-milk altogether, and simply let the child live, for a few days, on milk and water alone, the milk being of *one* cow, and in proportion of two-thirds to one-third of warm water—not *hot* water; the milk should not be scalded with hot water, as it injures its properties; besides, it is only necessary to give the child his food with the chill just off. The above food, where the stomach is disordered, is an admirable one, and will often set the child to rights without giving him any

medicine whatever. Moreover, there is plenty of nourishment in it to make the babe thrive; for after all it is the milk that is the important ingredient in all the foods of infants; they can live on it, and on it alone, and thrive amazingly.

The reason of farinaceous food making babes (until they have commenced cutting their teeth) "windy" is, that the starch of the farinaceous food (and all farinaceous foods contain more or less of starch) is not digested, and is not, as it ought to be, converted by the saliva into sugar; hence "wind" is generated and pain and convulsions often follow in the train.

The great desideratum in devising an infant's formula for food, is to make it, until he be nine months old, to resemble as much as possible a mother's own milk; and which the foregoing formula, as nearly as is practicable, does resemble; hence its success and popularity.

As soon as a child begins to cut his teeth the case is altered, and farinaceous food, with milk and with water, becomes an absolute necessity.

We wish, then, to call your especial attention to the following facts, for they are facts:—Farinaceous foods of all kinds, before a child commences cutting his teeth (which is when he is about six or seven months old) are worse than

useless they are positively injurious, they are, during the early period of infant life, perfectly indigestible, and may bring on—which they frequently do—convulsions. A babe fed on farinaceous food alone would certainly die of starvation; for "up to six or seven months of age, infants have not the power of digesting farinaceous or fibrinous substances."—Dr. Letheby *On Food.*

A babe's salivary glands, until he be six or seven months old, does not secrete its proper fluid, namely, ptyalin, and consequently the starch of the farinaceous food (and all farinaceous food contains starch) is not converted into dextrine and grape-sugar, and is, therefore, perfectly indigestible and useless—nay, injurious to an infant, and may bring on pain and convulsions, and even death; hence, the giving of farinaceous food, until a child be six or seven months old, is one and the principal cause of the frightful infant mortality at the present time existing in America, and which is a disgrace to any civilized land!

Stuffing Babies.

In passing, allow us to urge you never to stuff a babe—never overload his little stomach with food; it is far more desirable to give him a little

not enough, than to give him a little too much. Many a poor child has been, like a young bird, killed with stuffing. If a child be at the breast, and at the breast alone, there is no fear of his taking too much; but if he be brought up on artificial food, there is great fear of his overloading his stomach. Stuffing a child brings on vomiting and bowel complaints, and a host of other diseases which now it would be tedious to enumerate. Let us then, urge you, on no account, to overload the stomach of a little child.

There will, then, in many cases, be quite sufficient nourishment in the above; we have known some robust infants brought up on it, and on it alone, without a particle of farinaceous food, or of any other food, in any shape or form whatever. But if it should not agree with the child, or if there should not be sufficient nourishment in it, then the food recommended before ought to be given, with only this difference—a little new milk must from the beginning be added, and should be gradually increased, until nearly all milk be used.

Boiled Milk.

The milk, as a general rule, ought to be *unboiled*: but if it purge violently, or if it cause offensive motions--which it sometimes does—then

it must be boiled. The moment the milk boils up, it should be taken off the fire.

Food ought for the first month to be given about every two hours; for the second month, about every three hours; lengthening the space of time as the baby advances in age. A mother must be careful not to over-feed a child, as over-feeding is a prolific source of disease.

Let it be thoroughly understood, and let there be no mistake about it, that a babe during the first nine months of his life, MUST have—it is absolutely necessary to his very existence—milk of some kind, as a staple and principal article of his diet, either mother's or wet-nurse's, or goats', or cows' milk.

How to Choose a Wet-Nurse.

We would inquire particularly into the state of her health; whether she be of a healthy family. Did her father, mother, brother, or sister die of consumption, cancer, or scrofula; ascertaining if there be any seams or swellings about her neck; any eruptions or blotches upon her skin; if she has a plentiful breast of milk, and if it be of good quality (which may readily be ascertained by milking a little into a glass); if she has good nipples, sufficiently long for the baby to hold; that they be not sore; and if her own child be

of the same or nearly of the same age, as the one you wish her to nurse. Ascertain, whether she menstruate during suckling; if she does, the milk is not so good and nourishing, and you had better decline taking her. Assure yourself that her own babe is strong and healthy, and that he is free from a sore mouth, and from a "breaking-out" of the skin. Indeed, if it be possible to procure such a wet-nurse, she ought to be from the country, of ruddy complexion, of clear skin, and of between twenty and five-and-twenty years of age, as the milk will then be fresh, and pure, and nourishing.

We consider it to be of great importance that the infant of the wet-nurse should be, as nearly as possible, of the same age as your own, as the milk varies in quality according to the age of the child. For instance, during the commencement of suckling, the milk is thick and creamy, similar to the biestings of a cow, which, if given to a babe a few months old, would cause derangement of the stomach and bowels. After the first few days, the appearance of the milk changes; it becomes of a bluish-white color, and contains less nourishment. The milk gradually becomes more and more nourishing as the infant becomes older and requires more support.

In selecting a wet-nurse for a very small and feeble babe, you must carefully ascertain that the nipples of the wet-nurse are good and soft, and yet not very large. If they be very large, the child's mouth being very small, he may not be able to hold them. You must note, too, whether the milk flows readily from the nipple into the child's mouth; if it does not, he may not have the strength to draw it, and he would soon die of starvation. The only way of ascertaining whether the infant really draws the milk from the nipple, can be done by examining the mouth of the child *immediately* after taking the breast, and seeing for yourself whether there be milk, or not, in his mouth.

Very feeble new-born babes sometimes cannot take the breast, be the nipples and the breasts ever so good. In such a case, cows' milk-water-sugar-and-salt, as recommended, must be given in small quantities at a time—from two to four teaspoonfuls—but frequently; if the child be awake, every hour, or every half-hour, both night and day, until he be able to take the breast. If, then, a puny, feeble babe is only able to take but a little at a time, and that little by teaspoonfuls, he must be given it often, because "many a mickle makes a muckle,"

We have known many puny, delicate children who had not strength to hold the nipple in their mouths, but who could take milk and water (as above recommended) by teaspoonfuls only at a time with steady perseverance, and giving it every half-hour or hour (according to the quantity swallowed), at length be able to take the breast, and eventually become strong and hearty children; but such cases require unwearied watching, perseverance, and care. Bear in mind, then, that the smaller the quantity of milk and water given at a time the oftener must it be administered, as, of course, the babe must have a certain quantity of food to sustain life.

Diet of a Wet-Nurse, or of a Mother who is Suckling.

It is a common practice to cram a wet-nurse with food, and to give her strong ale to drink, to make good nourishment and plentiful milk! This practice is absurd; for it either, by making the nurse feverish, makes the milk more sparing than usual, or it causes the milk to be gross and unwholesome. On the other hand, we must not run into an opposite extreme. The mother or the wet-nurse, by using those means most conducive to her own health, will best advance the interest of her little charge.

A wet-nurse ought to live somewhat in the following way:—Let her for breakfast have black tea, with one or two slices of cold meat, if her appetite demand it, but not otherwise. She ought not to have dinner later than half-past one or two o'clock; she should eat for dinner, either mutton or beef, with either mealy potatoes, or asparagus, or French beans, or turnips, or broccoli, or cauliflower, and stale bread. Rich pastry, soups, gravies, high-seasoned dishes, salted meats, greens, and cabbage, must one and all be carefully avoided; they only tend to disorder the stomach, and thus to deteriorate the milk.

It is a common remark, that "a mother who is suckling may eat anything." We do not agree with this opinion. Can impure or improper food make pure and proper milk, or can impure or improper milk make good blood for an infant, and thus good health?

Tea should be taken at half-past five or six o'clock. Hot and late suppers are prejudical to the mother, or the wet-nurse, and, consequently, to the child. The wet-nurse ought to be in bed every night at ten o'olock.

It might be said that we have been too minute and particular in our rules for a wet-nurse; but when it is considered of what importance good

milk is to the well-doing of an infant, in making him strong and robust, not only now, but as he grows up to manhood, we trust we shall be excused.

Other Hints with regard to the Management of a Wet-Nurse.

A wet-nurse is frequently allowed to remain in bed until a late hour in the morning, and during the day to continue in the house, as if she were a fixture! How is it possible that any one, under such treatment, can continue healthy? A wet-nurse ought to rise early, and, if the weather and season will permit, take a walk, which will give her an appetite for breakfast, and will make a good meal for her little charge. This, of course, cannot, during the winter months, be done; but even then, she ought, some part of the day, to take every opportunity of walking out; indeed, in the summer time she should live half the day in the open air.

She ought to avoid crowded rooms; her mind should be kept calm and unruffled, as nothing disorders the milk so much as passion, and other violent emotions of the mind; a fretful temper is very injurious, on which account you should, in choosing your wet-nurse, endeavor to procure

one of a mild, calm, easy and placid disposition.

"'The child is poisoned.'

'Poisoned! by whom?'

'By you. You have been fretting.'

'Nay, indeed, mother. How can I help fretting?'

'Don't tell me, Margaret. A nursing mother has no business to fret. She must turn her mind away from her grief to the comfort that lies in her lap. Know you not, that the child pines if the mother vexes herself?'"—*The Cloister and the Hearth*; by Charles Reade.

A wet-nurse ought never to be allowed to dose her little charge with medicine of any kind whatever. Let her thoroughly understand this, and let there be no mistake in the matter. Do not for one moment allow your children's health to be tampered and trifled with. A baby's health is too precious to be doctored, to be experimented upon, and to be ruined by an ignorant person.

At What Age a Child ought to be Weaned.

This, of course, must depend both upon the strength of the child, and upon the health of the parent; on an average, nine months is the proper time. If the mother be delicate, it may be found necessary to wean the infant at six months; or if he be weak, or laboring under any disease, it may be well to continue suckling him for twelve months; but after that time, the

breast will do him more harm than good, and will, moreover, be likely to injure the mother's health, and may, if she be so predisposed, excite consumption.

How a Mother should Act when she Weans Her Child.

She ought, as the word signifies, do it gradually—that is to say, she should by degrees, give him less and less of the breast, and more and more of artificial food; at length she must only suckle him at night; and lastly, it would be well for the mother either to send him away, or to leave him at home, and, for a few days, to go away herself.

A good plan is, for the nurse-maid to have a half-pint bottle of new milk—which has been previously boiled—in the bed, so as to give a little to him in lieu of the breast. The warmth of the body will keep the milk of a proper temperature.

Gin or Peppermint to Disperse "Wind."

It is a murderous practice to add either gin or peppermint (which is oil of peppermint dissolved in spirits) in his food. Many children have, by such a practice, been made puny and delicate, and have gradually dropped into an

untimely grave. An infant who is kept, for the first five or six months, *entirely* to the breast—more especially if the mother be careful in her own diet—seldom suffers from "wind;" those, on the contrary, who have much or improper food, suffer severely.

Care in feeding, then, is the grand preventive of "wind;" but if, notwithstanding all your precautions, the child should be troubled with flatulence, the remedies recommended under the head of Flatulence will generally be found to answer the purpose.

Sugar For Sweetening a Baby's Food.

A *small* quantity of sugar in an infant's food is requisite, sugar being nourishing and fattening, and making cow's milk to resemble somewhat in its properties human milk; but, bear in mind, it must be used sparingly. *Much* sugar cloys the stomach, weakens the digestion, produces acidity, sour belchings, and wind:—

"Things sweet to taste, prove in digestion sour."—*Shakespeare.*

If a babe's bowels be either regular or relaxed, lump sugar is the best for the purpose of sweetening his food; if his bowels are inclined to be costive, raw sugar ought to be substituted for lump sugar, as raw sugar acts on a young babe as

an aperient, and in the generality of cases, is far preferable to physicking him with opening medicine. An infant's bowels, whenever it be practicable (and it generally is), ought to be regulated by a judicious dietary rather than by physic.

CHAPTER XXX.

VACCINATION.

WE consider vaccination to be one of the greatest blessings ever conferred upon mankind. Small-pox, before vaccination was adopted, ravaged the country like a plague, and carried off thousands annually; and those who did escape with their lives were frequently made loathsome and disgusting objects by it. Even inoculation (which is cutting for the small-pox) was attended with danger, more especially to the unprotected—as it caused the disease to spread like wildfire, and thus it carried off immense numbers.

Vaccination is one, and an important cause of our increasing population; small-pox, in olden times, decimated the country.

We grant you that vaccination does not *always* protect your child, neither does inoculation;

but when he is vaccinated, if he take the infection, he is seldom pitted, and very rarely dies, and the disease assumes a comparatively mild form. There are a few, very few fatal cases recorded after vaccination, and these may be considered as only exceptions to the general rule; and, possibly, some of these may be traced to the arm, when the child was vaccinated, not having taken proper effect.

If children and adults were re-vaccinated—say every seven years after the first vaccination—depend upon it, even these rare cases would not occur, and in a short time small-pox would be known only by name.

It would be an excellent plan for every person, once every seven years, to be re-vaccinated, and even oftener if small-pox be rife in the neighborhood. Vaccination, however frequently performed, can never do the slightest harm, and might do inestimable good. Small-pox is both a pest and a disgrace, and ought to be constantly fought and battled with, until it be banished from the country.

Where Should the "Matter" be Obtained?

If a doctor be careful—which, of course, he will be—to take the matter from a healthy child,

and from a well-formed vesicle, we consider it better than taking it direct from the cow, for the following reasons :—The cow-pox lymph, taken direct from the cow, produces much more violent symptoms than after it has passed through several persons ; indeed, in some cases, it has produced effects as severe as cutting for the small-pox, besides, it has caused, in many cases, violent inflammation and even sloughing of the arm. There are also several kinds of spurious cow-pox to which the cow is subject, and which would be likely to be mistaken for the real lymph. Again, if even the genuine matter were not taken from the cow exactly at the proper time, it would be deprived of its protecting power.

Within the last few years much has been done to improve the mode of vaccination and disseminate its value among the masses. Many physicians now use what are called "points," which are prepared for this purpose, and do away with much of the unpleasantness and risk of obtaining good "matter." Those parents who live in the country and often vaccinate their own children, should be over particular and sure that the matter used is genuine.

If it is taken from a child, first make yourself sure that the child or his parents has no

hereditary disease—disease of the skin, lungs or throat. Know that the child is and has been a healthy one. You cannot be too particular on this point, as the future of your child will be affected one way or the other by the operation.

At What Age an Infant may be First Vaccinated.

A child may be vaccinated when he is two months old, as the sooner he is protected the better. Moreover, the older he is the greater will be the difficulty in making him submit to the operation, and in preventing his arm from being rubbed, thus endangering the breaking of the vesicles, and thereby interfering with its effects. If small-pox be prevalent in the neighborhood, he may, with perfect safety, be vaccinated at the end of the first month; indeed, if the small-pox be near at hand, he *must* be vaccinated, regardless of his age, and regardless of everything else, for small-pox spares neither the young nor the old; and if a newborn babe should unfortunately catch the disease, he will most likely die, as at his tender age he would not have strength to battle with so formidable an enemy. "A case, in a general 'Lying-in-Hospital,' of small-pox, occurred in a woman a few days after her admission and

the birth of her child. Her own child was vaccinated when only four days old, and all the other infants in the house, varying from one day to a fortnight and more. All took the vaccination, and all escaped the small-pox, including the woman's own child, which suckled her and slept with her."

Effects of Vaccination on an Infant.

At about the fifth day after vaccination, and for three or four days, he is generally a little feverish; the mouth is slightly hot, and he delights to have the nipple in his mouth. He does not rest so well at night; he is rather cross and irritable; and, sometimes, has a slight bowel-complaint. The arm, about the ninth or tenth day, is usually much inflamed—that is to say, it is, for an inch or two or more around the vesicles, red, hot, swollen, and continues in this state for a day or two, at the end of which time the inflammation gradually subsides. It might be well to state that the above slight symptoms are desirable, as it proves that the vaccination has had a proper effect on his system, and that, consequently, he is more likely to be thoroughly protected from any risk of catching small-pox.

Medicines During the Vaccination.

We would advise giving no medicines as it would be likely to work off some of its effects, and thus would rob the cow-pox of its efficiency on the system. We do not like to interfere with vaccination in any way whatever (except, at the proper time, to take a little matter from the arm), but to allow the pox to have full power upon his constitution.

If the matter that is put into the arm be healthy, what need is there of medicine? And if the matter be not of good quality, we are quite sure that no physic will make it so. Look, therefore, at the case in whatever way you like, medicine after vaccination is *not* necessary; but, on the contrary, hurtful. If the vaccination produce a slight feverish attack, it will, without the administration of a particle of medicine, subside in two or three days.

The Arm After Vaccination.

The only precaution necessary is to take care that the arm be not rubbed; otherwise the vesicles may be prematurely broken, and the efficacy of the vaccination may be lessened. The sleeve, in vaccination, ought to be large and soft, and should not be tied up. The tying up of a

sleeve makes it hard, and is much more likely to rub the vesicles than if it were put on the usual way. Should the arm be inflamed after vaccination, smear frequently, by means of a feather or a camel's hair brush, a little cream on the inflamed part. This simple remedy will afford great comfort and relief.

Appearance of Arm After Scab Falls Off.

It might be well to remark, that the scabs ought always to be allowed to fall off of themselves. They must not, on any account, be picked or meddled with. With regard to the proper appearance of the arm, after the falling off of the scab, "A perfect vaccine scar should be of small size, circular, and marked with radiations and indentations."—*Gregory.*

CHAPTER XXXI.

DENTITION.

THE period at which dentition commences is uncertain. It may, as a rule, be said that a babe begins to cut his teeth at seven months old. Some have cut teeth at three months; indeed, there are instances on record of infants having been born with teeth.

When a babe is born with teeth, they generally drop out. On the other hand, teething, in some children, does not commence until they are a year and a half or two years old. There are cases on record of adults who have never cut any teeth. An instance of the kind came under our own observation.

Number of First Teeth.

The first or temporary set consists of twenty. The first set of teeth are usually cut in pairs. They do not, of course, always appear in the same rotation. Nothing is more uncertain than the order of teething. A child seldom cuts his second molars until after he is two years old. He is usually, from the time they first appear, two years in cutting his first set of teeth, and

therefore a child of two years old has sixteen; and one of two and a half years, has twenty.

Convulsions While Teething.

Should a child have convulsions, the first thing to be done (after sending for a medical man) is to freely dash water upon the face, and to sponge the head with cold water, and as soon as warm water can be procured, to put him into a warm bath of 98 degrees Fahrenheit. If a thermometer be not at hand, you must plunge your own elbow into the water; a comfortable heat for your elbow will be the proper heat for the infant. He must remain in the bath for a quarter of an hour, or until the fit be at an end. The body must, after coming out of the bath, be wiped with warm and dry and coarse towels; he ought then to be placed in a warm blanket. The gums must be lanced, and cold water should be applied to the head. An enema, composed of table salt, olive oil, and warm oatmeal gruel—in the proportion of one tablespoonful of salt, one of oil, and a teacupful of gruel—ought then to be administered, and should, until the bowels have been well opened, be repeated every quarter of an hour; as soon as he comes to himself a mild purgative ought to be given.

It may be well for the comfort of a mother, to state that a child in convulsions is perfectly insensible to all pain whatever; indeed, a return to consciousness speedily puts convulsions to the rout.

Hard Gum-Stick.

We think it is a bad practice to give any hard, unyielding substance to a child, as it tends to harden the gums, and, by so doing, causes the teeth to come through with greater difficulty. We have found softer substances, such as either a piece of wax taper, or an India-rubber ring, or a piece of the best bridle leather, or a crust of bread, of great service. If a piece of crust be given as a gum-stick, he must, while biting it, be well watched, or by accident he might loosen a large piece of it, which might choke him. The pressure of any of these excites a more rapid absorption of the gum, and thus causes the tooth to come through more easily and quickly.

Sucking Thumb.

The thumb is the best gum stick in the world. It is convenient; it is handy (in every sense of the word); it is of the right size, and of the proper consistence, neither too hard nor too soft; there is no danger, as of some artificial gum-

sticks, of its being swallowed, and thus choking the child. The sucking of the thumb causes the salivary glands to pour out their contents, and thus not only to moisten the dry mouth, but assist the digestion; the pressure of the thumb eases, while the teeth are "breeding," the pain and irritation of the gums, and helps, when the teeth are sufficienly advanced, to bring them through the gums. Sucking of the thumb will often make a cross infant contented and happy, and will frequently induce a restless babe to fall into a sweet refreshing sleep. Truly may the thumb be called a baby's comfort. By all means, then, let your child suck his thumb whenever he likes, and as long as he chooses to do so.

After he has cut the whole of his first set of teeth, that is to say, when he is about two years and a half old, he might, if it be likely to become a habit, be readily cured by the following method:

Make a paste of aloes and water, and smear it upon his thumb. One or two dressings will suffice, as after just tasting the bitter aloes he will take a disgust to his former enjoyment, and the habit will almost immediately be discontinued.

Many persons have, we know, an objection to children sucking their thumbs, as for instance:—

"Perhaps it's as well to keep children from plums,
And from pears in the season, and sucking their thumbs."

Our reply is:—

P'rhaps 'tis as well to keep children from pears—
The pain they might cause, is oft followed by tears;
'Tis certainly well to keep them from plums,
But certainly not from sucking their thumbs!
If a babe suck his thumb,
'Tis an ease to his gum;
A comfort; a boon; a calmer of grief;
A friend in his need—affording relief;
A solace; a good; a soother of pain;
A composer to sleep; a charm, and a gain.
'Tis handy, at once, to his sweet mouth to glide;
When done with, drops gently down by his side;
'Tis fix'd, like an anchor, while the babe sleeps,
And the mother, with joy, her still vigil keeps.

Fruit During Teething.

Do not give a child fruit, unless it be a few ripe strawberries or raspberries, or a roasted apple, or the juice of five or six grapes—taking care that he does not swallow either the seeds or the skin; or the insides of an orange. Such fruits, if the bowels be in a costive state, will be particularly useful.

All stone fruit, *raw* apples or pears, ought to be carefully avoided, as they not only disorder

the stomach and the bowels—causing convulsions, gripings, etc.—but they have the effect of weakening the bowels, and thus of engendering worms.

Bibs.

A child who is teething dribbles, and thereby wets his chest, which frequently causes him to catch cold. Have in readiness to put on several flannel "dribbling bibs," so that they may be changed as often as they become wet; or, if he dribble very much, the oiled silk dribbling bibs, instead of the flannel ones, may be used.

Teething Time More Subject to Disease.

The teeth are a fruitful source of suffering and disease; they are, with truth, styled "our first and our last plagues." Dentition is the most important period of a child's life, and is the exciting cause of many infantile diseases; during this period, therefore, he requires constant and careful watching. When we consider how the teeth elongate and enlarge in his gums, pressing on the nerves and on the surrounding parts, and thus how frequently they produce pain, irritation and inflammation; when we further contemplate what sympathy there is in the nervous system, and how susceptible the young are to pain—no

surprise can be felt at the immense disturbance, and the consequent suffering and danger frequently experienced by children while cutting their first set of teeth. The complaints or the diseases induced by dentition are numberless, affecting almost every organ of the body; the *brain*, occasioning convulsions, water on the brain, etc.; the *lungs*, producing congestion, inflammation, cough, etc.; the *stomach*, exciting sickness, flatulence, acidity, etc.; the *bowels*, inducing griping, at one time costiveness, and at another time purging; the *skin*, causing "breakings-out."

To prevent these diseases, means ought to be used to invigorate a child's constitution by plain, wholesome food, as recommended under the article of diet; by exercise and fresh air; by allowing him, weather permitting, to be out of doors a great part of every day; by lancing the gums when they get red, hot, and swollen; by attention to the bowels, and if he suffer more than usual, by keeping them in rather a relaxed state by any simple purgative, such as either castor oil, or magnesia and rhubarb, etc.; and let us add, by attention to his temper—many children are made feverish and ill by petting and spoiling them. On this subject we cannot do better than refer you to an excellent little

work entitled Abbot's *Mother of Home*, an English work, wherein the author proves the great importance of early training.

Painful Dentition.

Painful dentition may be divided into two forms—the mild, and the severe. In the *mild* form the child is peevish and fretful, and puts his fingers, and everything within reach to his mouth; he likes to have his gums rubbed, and takes the breast with avidity; indeed it seems a greater comfort to him than ever. There is generally a considerable flow of saliva, and he has frequently a more loose state of bowels than is his wont.

Now, with regard to the more *severe* form of painful dentition:—The gums are red, swollen, and hot, and he cannot, without expressing pain, bear to have them touched; hence, if he be at the breast, he is constantly losing the nipple. There is dryness of the mouth, although before there had been a great flow of saliva. He is feverish, restless, and starts in his sleep; his face is flushed; his head is heavy and hot; he is sometimes convulsed; he is frequently violently griped and purged, and suffers severely from flatulence; he is predisposed to many and severe diseases.

The treatment, of the *mild* form, consists of friction of the gums with the finger, with a *little* "soothing syrup," a tepid-bath of about 92 degrees Fahrenheit, every night at bed time; attention to diet and to bowels; fresh air and exercise. For the mild form, the above plan will usually be all that is required. If he dribble, and the bowels be relaxed, so much the better; the flow of saliva and the increased action of the bowels afford relief, and therefore must not be interfered with. In the *mild* form, lancing of the gums is not desirable. The gums ought not to be lanced, unless the teeth be near at hand, and unless the gums be red, hot, and swollen.

In the *severe* form a physician should be consulted early, as more energetic remedies will be demanded; that is to say, the gums will require to be freely lanced, warm baths to be used, and medicines to be given, to ward off mischief from the head, from the chest, and from the stomach.

If you are living in the town, and your baby suffers much from teething, take him into the country. It is wonderful what change of air to the country will often do, in relieving a child who is painfully cutting his teeth. The number of deaths in New York, from teething, is frightful; in the country it is comparatively trifling.

Give Laxative or Astringent.

We should look upon the relaxation as an effort of nature to relieve itself. A child is never purged without a cause; that cause, in the generality of instances, is the presence of either some undigested food, or acidity, or depraved motions, that want a vent.

The better plan is, in such a case, to give a dose of aperient medicine, such as either castor oil, or magnesia and rhubarb; and thus work it off. If we lock up the bowels, we confine the enemy, and thus produce mischief. If he be purged more than usual, attention should be paid to the diet (if it be absolutely necessary to give him artificial food while suckling), and care must be taken not to overload the stomach.

Checking Coughs.

A cough is an effort of nature to bring up any secretion from the lining membrane of the lungs, or from the bronchial tubes; hence it ought not to be interfered with. We have known the administration of syrup of white poppies, or of paregoric, to stop the cough, and thereby to prevent the expulsion of the phlegm, and thus to produce either inflammation of the lungs, or bronchitis. Moreover, both paregoric and syrup of

white poppies are, for a young child, dangerous medicines (unless administered by a judicious physician), and ought never to be given by a mother.

"In the month of April a physician was sent for, in great haste. An infant, aged seventeen months, was laboring under convulsions and extreme drowsiness, from the injudicious administration of paregoric, which had been given to him to ease a cough. By the prompt administration of an emetic he was saved."

"Breaking-Out."

If a child, who is teething, is subject to a "breaking-out," (more especially behind the ears, which is disfiguring, and frequently very annoying), we would apply no external application to cure it, as we should look upon it as an effort of the constitution to relieve itself; and should expect, if the "breaking-out" were repelled, that either convulsions, or bronchitis, or inflammation of the lungs, or water on the brain, would be the consequence. The plan we should adopt would be, to be more careful in his diet; to give him less meat (if he is old enough to eat animal food), and to give him, once or twice a week, a few doses of mild purgative medicine; and, if the irritation from the "breaking-out" be great, to bathe it, occasionally, either with a little warm milk and water, or with rose water.

CHAPTER XXXII.

EXERCISE.

WE are great advocates for his having exercise in the open air. "The infant in arms makes known his desire for fresh air, by restlessness; it cries, for it cannot speak its wants; it is taken abroad and is quiet."

The age at which he ought to commence taking exercise will, of course, depend upon the season, and upon the weather. If it be summer, and the weather is fine, he should be carried in the open air a week or a fortnight after birth; but if it be winter, he ought not on any account to be taken out under the month, and not even then, unless the weather is mild for the season, and in the middle of the day. At the end of two months he should breathe the open air more frequently. And after the expiration of three months, he ought to be carried out *every day*, even if it be wet under foot, provided it be fine above, and the wind not too damp; by doing so we shall make him strong and hearty, and give the skin that mottled appearance which is so characteristic of health. He must, of course, be well clothed.

We cannot help expressing our disapprobation of the practice of smothering up an infant's face with a handkerchief, with a veil, or with any other covering, when he is taken out into the air. If his face be so muffled up, he may as well remain at home; as, under such circumstances, it is impossible for him to receive any benefit from the invigorating effects of the fresh air.

How to Induce a Baby to Take Exercise.

He must be encouraged to use muscular exertion; and, for this purpose, he ought to be frequently laid either upon a rug, or carpet; he will then stretch his limbs and kick about with perfect glee. It is a pretty sight, to see a little fellow kicking and sprawling on the floor. He crows with delight and thoroughly enjoys himself; it strengthens his back; it enables him to stretch his limbs, and to use his muscles, and is one of the best kinds of exercise a very young child can take. While going through his performances, his diaper, if he wears one, should be unfastened, in order that he might go through his exercises untrammeled. By adopting the above plan, the babe quietly enjoys himself—his brain is not over excited by it; this is an important consideration, for both mothers and

nurses are apt to rouse and excite very young children to their manifest detriment. A babe requires rest, and not excitement. How wrong it is, then, for either a mother or a nurse to be exciting and rousing a new-born babe. It is most injurious and weakening to his brain. In the early period of his existence his time ought to be almost entirely spent in sleeping and in suckling.

Tossing Children.

We have seen a child tossed nearly to the ceiling. Can anything be more cruel and absurd? Violent tossing of a young babe ought never to be allowed; it only frightens him, and has been known to bring on convulsions. He should be gently moved up and down (not tossed); such exercise causes a proper circulation of the blood, promotes digestion, and soothes to sleep. He must always be kept quiet immediately after taking the breast; if he be tossed directly afterwards, it interferes with his digestion, and is likely to produce sickness.

CHAPTER XXXIII.

SLEEP.

THE "lying-in room" is generally kept too warm, its heat being, in many instances, more that of an oven than of a room. Such a place is most unhealthy, and is fraught with danger both to the mother and the baby. We are not, of course, to run into an opposite extreme, but are to keep the room at a moderate and comfortable temperature. The door ought occasionally to be left ajar, in order the more effectually to change the air, and thus to make it more pure and sweet.

A new-born babe, then, ought to be kept comfortably warm, but not very warm. It is folly in the extreme to attempt to harden a very young child either by allowing him, in the winter time, to be in a bedroom without a fire, or by dipping him in *cold* water, or by keeping him with scant clothing on his bed. The temperature of a bedroom in the winter time should be, as nearly as possible, at 60 degrees Fahrenheit. Although the room should be comfortably warm, it ought from time to time to be properly ventilated. An unventilated room soon becomes foul,

and, therefore, unhealthy. How many in this world, both children and adults, are "poisoned with their own breaths!"

An infant should not be allowed to look at the glare of a fire, nor at that of a light, as the glare tends to weaken the sight, and sometimes brings on inflammation of the eyes. In speaking to, and in noticing a baby, you ought always to stand *before*, and not *behind* him, or it might make him squint.

Babe to Lie Alone.

At first—say, for the first few months—he requires the warmth of another person's body, especially in the winter; but care must be taken not to overlay him, as many infants, from carelessness in this particular, have lost their lives. After the first few months he had better lie alone on a horse-hair mattress.

Rocking an Infant to Sleep.

We do not approve of rocking an infant to sleep. If the rules of health be observed, he will sleep both soundly and sweetly without rocking; if they be not, the rocking might cause him to fall into a feverish, disturbed slumber, but not into a refreshing, calm sleep. Besides, if you

once take to the habit, he will not go to sleep without it.

A rocking-chair, or rockers to the cradle, may be useful to a lazy nurse or mother, and may induce a child to sleep (but that restlessly) when he does not need sleep, or when he is wet and uncomfortable, and requires "changing;" but will not cause him to have that sweet and gentle and exquisite slumber so characteristic of a baby who has no artificial appliances to make him sleep. No! rockers are perfectly unnecessary, and the sooner they are banished from the nursery the better will it be for the infant community. We do not know a more wearisome and monotonous sound than the everlasting rocking to and fro in some nurseries; they are often accompanied by a dolorous lullaby from the nurse, which adds much to the misery and depressing influence of the performance.

Covering the Crib.

If the head of the crib be covered, the babe cannot breathe freely; the air within the crib becomes contaminated, and thus the lungs cannot properly perform their functions. If his sleep is to be refreshing, he must breathe pure air. We do not even approve of a head to a crib. A

child is frequently allowed to sleep on a bed with the curtain drawn completely close, as though it were dangerous for a breath of air to blow upon him. This practice is most injurious. An infant must have the full benefit of the air of the room; indeed, the bed-room door ought to be frequently left ajar, so that the air of the apartment may be changed; taking care, of course, not to expose him to a draught. If the flies, while he is asleep, annoy him, let a net veil be thrown over his face, as he can readily breathe through net, but not through a handkerchief.

How a Babe Should be Dressed When He is Put Down to Sleep.

Whenever he is put down to sleep, be more than usually particular that his dress be loose in every part; be careful that there are neither strings nor bands to cramp him. Let him, then, during repose, be more than ordinarily free and unrestrained.

> "Whilst thus in cradled rest your infant sleeps,
> Let watchful eyes unceasing vigil keep;
> Lest cramping bonds his pliant limbs constrain,
> And cause defects that manhood may retain."

Much Sleep.

A babe who sleeps a great deal thrives much more than one who does not. We have known

many children, who were born small and delicate, but who slept the greater part of their time, become strong and healthy. On the other hand, we have known those who were born large and strong, yet who slept but little, become weak and unhealthy.

The common practice of a nurse allowing a baby to sleep upon her lap is a bad one, and ought never to be countenanced. He sleeps cooler, more comfortably and soundly in his crib.

The younger an infant is the more he generally sleeps, so that during the early months he is seldom awake, and then only to take the breast.

If there be pain in any part of the body, or if any of the functions be not properly performed, he sleeps but little. On the contrary, if there is exemption from pain, and if there is a due performance of all the functions, he sleeps a great deal; and thus the body becomes refreshed and invigorated.

Medicine Given for Sleep.

The practice of giving composing medicine to a young child cannot be too strongly condemned. If he does not sleep enough, the mother ought to ascertain if the bowels be in a proper state; whether they be sufficiently opened; that the mo-

tions be of good color--namely, a bright yellow, inclining to orange color—and free from slime or from bad smell. An occasional dose of rhubarb and magnesia is frequently the best composing medicine he can take.

Smothering in Bed.

Suffocation is produced either by ignorance or by carelessness. From *ignorance* in mothers, in their not knowing the common laws of life, and the vital importance of free and unrestricted respiration, not only when babies are up and about, but when they are in bed and asleep. From *careless-ness*, in their allowing young and thoughtless servants to have the charge of infants at night; more especially as young girls are usually heavy sleepers, and are thus too much overpowered with sleep to attend to their necessary duties.

A foolish mother sometimes goes to sleep while allowing her child to continue suckling. The unconscious babe, after a time, loses the nipple, and buries his head in the bed-clothes. She awakes in the morning, finding, to her horror, a corpse by her side, with his nose flattened, and a frothy fluid, tinged with blood, exuding from his lips. A mother ought, therefore, never to go to sleep until her child have finished suckling.

The following are a few rules to prevent an infant from being accidentally smothered:

(1.) Let your baby, while asleep, have plenty of room in the bed.

(2.) Do not allow him to be too near to you; or if he be unavoidably near you (from the small size of the bed), let his face be turned to the opposite side.

(3.) Let him lie fairly either on his side or on his back.

(4.) Be careful to ascertain that his mouth be not covered with the bed-clothes.

(5.) Do not smother his face with clothes, as a plentiful supply of pure air is as necessary when he is awake, or even more so, than when he is asleep.

(6.) Never let him lie low in the bed.

(7.) Let there be no pillow near the one his head is resting on, lest he roll to it, and thus bury his head in it. Remember, a young child has neither the strength nor the sense to get out of danger; and if he unfortunately either turn on his face, or bury his head in a pillow that is near, the chances are that he will be suffocated, more especially as these accidents usually occur at night, when the mother or the nurse is fast asleep.

(8.) Never intrust him at night to a young and thoughtless servant.

CHAPTER XXXIV.

THE BLADDER AND THE BOWELS OF AN INFANT.

A MOTHER ought daily to satisfy herself as to the state of the bladder and the bowels of her child. She herself should inspect the motions, and see that they are of a proper color (bright yellow, inclining to orange) and consistence (that of thick gruel), that they are neither slimy nor curdled, nor green; if they should be either the one or the other, it is a proof that she herself has, in all probability, been imprudent in her diet, and that it will be necessary for the future that she be more careful both in what she eats and what she drinks.

She ought, moreover, to satisfy herself that the urine does not smell strongly, that it does not stain the diapers, and that he makes a sufficient quantity.

A frequent cause of a child crying is, he is wet and uncomfortable, and wants drying and changing, and the only way he has of informing his mother of the fact is by crying lustily, and thus telling her in most expressive language of her thoughtlessness and carelessness.

A babe of three months and upwards, ought to be held out at least a dozen times during the twenty-four hours; if such a plan were adopted, diapers might at the end of three months be dispensed with—a great desideratum—and he would be inducted into clean habits—a blessing to himself and a comfort to all around, and a great saving of dresses and of furniture. "Teach your children to be clean. A dirty child is the mother's disgrace." Truer words were never writtent—A DIRTY CHILD IS THE MOTHER'S DISGRACE.

CHAPTER XXXV.

AILMENTS, DISEASES, ETC.

Wheeze in New-Born Infants.

THIS is not dangerous if it occur immediately after birth; as soon as the bowels have been opened, it generally leaves him, or even before, if he give a good cry, which as soon as he is born he usually does. If there be any mucus either within or about the mouth, impeding breathing, it must be removed with a soft handkerchief.

Medicine to Infants.

It is now proved that the giving of medicine to a babe immediately after birth is unnecessary,

nay, it is hurtful—that is, provided he be early put to the breast, as the mother's *first* milk is generally sufficient to open the bowels. An eminent physician makes the following sensible remarks on this subject—"I used to limit any aperient to a new-born infant to those which had not the first milk, and who had wet-nurses, whose milk was, of course, some weeks old; but for many years I have not allowed any aperient at all to any new-born infant, and I am satisfied it is the safest and wisest plan."

The advice of this physician, to give no aperient to a new-born infant—is most valuable, and ought to be strictly followed. By adopting his recommendation, much after misery might be averted. If a new-born baby's bowels be costive—rather than give him an aperient, try the effect of a little moist sugar, dissolved in a little water. That is to say, dissolve half a teaspoonful of pure, unadulterated, *raw* sugar, in a teaspoonful of warm water and administer it to him; if in four hours it should not operate, repeat the dose. Butter and raw sugar is a popular remedy, and is sometimes used by a nurse to open the bowels of a new-born babe, and where there is costiveness, answers the purpose exceedingly well, and is far superior to castor oil. Try by all means to do, if

possible, without a particle of opening medicine. If you once begin to give aperients, you will have frequently to repeat them. Opening physic leads to opening physic, until at length his stomach and bowels will become a physic shop. Let us then, emphatically say, avoid, if possible, giving a new-born babe a drop or grain of opening medicine. If from the first you refrain from giving an aperient, he seldom requires one afterwards. It is the *first* step, in this, as in all other things, that is so important to take.

If a new-born babe have not for twelve hours made water, the physician ought to be informed of it, in order that he may inquire into the matter, and apply the proper remedies. Be particular in attending to these directions, or evil consequences will inevitably ensue.

Milk in Infants' Breasts.

The idea of there being real milk in a baby's breast is doubtful, the squeezing of the bosom is barbarous, and the application of plasters useless. "Without actually saying," says Locock, "there is milk secreted in the breasts of infants, there is undoubtedly not rarely considerable swelling of the breasts both in female and male infants, and on squeezing them a serous fluid oozes out.

We agree with you that the nurses should never be allowed to squeeze them, but be ordered to leave them alone."

Serious and Slight Ills.

We deem it well to make the distinction between *serious* and *slight* ailments; we are addressing a mother. With regard to serious ailments, we do not think ourselves justified, except in certain urgent cases, in instructing a parent to deal with them. It might be well to make a mother acquainted with the *symptoms*, but not with the *treatment*, in order that she might lose no time in calling in medical aid. This we hope to have the pleasure of doing in a future chapter.

Serious diseases, with a few exceptions, and which we will indicate in a subsequent chapter, ought never to be treated by a parent, not even in the early stages, for it is in the early stages that the most good can generally be done. It is utterly impossible for any one who is not trained to the medical profession to understand a serious disease in all its bearings, and thereby to treat it satisfactorily.

There are some exceptions to these remarks. It will be seen in a future chapter that physicians consider that a mother ought to be made acquainted with the treatment of some of the more

serious diseases, where delay in obtaining immediate medical assistance might be death. We have supplied the deficiency in subsequent chapters.

The ailments and the diseases of infants, such as may, in the absence of the doctor, be treated by a parent, are the following:—Chafings, Convulsions, Costiveness, Flatulence, Gripings, Hiccup, Looseness of the Bowels (Diarrhœa), Dysentery, Nettle-rash, Red-gum, Stuffing of the Nose, Sickness, Thrush. In all these complaints we will tell you—*What to do*, and—*What* NOT *to do*.

Causes Chafing.

The want of water, inattention and want of cleanliness, are the usual causes of chafing.

What to Do.

The chafed parts ought to be well and thoroughly sponged with tepid rain water—allowing the water from a well-filled sponge to stream over them—and, afterwards, they should be thoroughly, but tenderly, dried with a soft towel, and then be dusted, either with finely powdered starch, or with violet powder, or with finely-powdered native carbonate of zinc, or they should be bathed with finely-powdered fuller's-earth and tepid water.

If, in a few days, the parts be not healed, discontinue the above treatment, and use the following application :—Beat up well together the whites of two eggs, then add, drop by drop, two tablespoonfuls of brandy. When well mixed, put it into a bottle and cork it up. Before using it let the excoriated parts be gently bathed with lukewarm rain water, and, with a soft napkin, be tenderly dried; then, by means of a camel's hair brush, apply the above liniment, having first shaken the bottle. But bear in mind, after all that can be said and done, there is nothing in these cases like water—there is nothing like keeping the parts clean, and the only way of thoroughly effecting this object is by putting him every morning into his tub.

What Not to Do.

Do not apply white lead, as it is a poison. Do not be afraid of using plenty of water, as cleanliness is one of the most important items of the treatment.

The Causes of Convulsions in Infants.

Stuffing him in the early months of his existence, with food, the mother having plenty of breast-milk; the constant physicking of a child by his own mother; teething; whooping cough, when attacking a very young baby.

We never knew a case of convulsions occur—say for the first four months—(except in very young infants laboring under whooping-cough), where children lived on the breast-milk alone, and where they were *not* frequently "doctored" by their mothers!

What to Do.

In a case of convulsions which has been caused by feeding an infant either with too much or with artificial food:—Give him, every ten minutes, a half-teaspoonful of ipecacuanha wine, until free vomiting be excited, then put him into a warm bath; and when he comes out of it administer to him a teaspoonful of castor oil, and repeat it every few hours, until the bowels be well opened.

What Not to Do.

Do not, for at least a month after the fit, give him artificial food, but keep him entirely to the breast. Do not apply leeches to the head.

What to Do in Case of Convulsions from Whooping-Cough.

There is nothing better than dashing cold water on the face, and immersing him in a warm bath of 98 degrees Fahr. If he be about his teeth,

and they are plaguing him, let the gums be both freely and frequently lanced. Convulsions seldom occur in whooping-cough, unless the child is either very young or exceedingly delicate. Convulsions attending an attack of whooping-cough make it a serious complication, and requires the assiduous and skillful attention of a judicious medical man.

What Not to Do.

Do not apply leeches; the babe requires additional strength, and not to be robbed of it; and do not attempt to treat the case yourself.

What to Do in Case of Costiveness.

We strongly object to the frequent administration of opening medicine, as the repetition of it increases the mischief to a tenfold degree.

If a babe, after the first few months, were held out, and if, at regular intervals, he were put upon his chair, costiveness would not so much prevail. It is wonderful how soon the bowels, in the generality of cases, by this simple plan, may be brought into a regular state. Besides, it inducts an infant into clean habits. We know many careful mothers who have accustomed their children, after the first three months, to do without diapers altogether. It causes at first a

little trouble, but that trouble is amply repaid by the good consequences that ensue; among which must be named the dispensing with such encumbrances as diapers. Diapers frequently chafe, irritate and gall the tender skin of a baby. But they cannot, of course, at an early age be dispensed with, unless a mother have great judgment, sense, tact and perseverance, to bring her little charge into the habit of having his bowels relieved and his bladder emptied every time he is either held out or put upon his chair.

Before giving an infant a particle of aperient medicine, try, if the bowels are costive, the effect of a little raw sugar and water, either half a teaspoonful of raw sugar dissolved in a teaspoonful or two of water, or give him, out of your fingers, half a teaspoonful of raw sugar to eat. We mean by *raw* sugar, not the white, but the pure and unadulterated sugar, and which you can only procure from a respectable grocer. If you are wise, you will defer, as long as you can, giving an aperient. If you once begin, and continue it for a while, opening medicine becomes a dire necessity, and then woe betide the poor unfortunate child. Or, give a third of a teaspoonful of honey, early in the morning, occasionally. Or, administer a warm water enema--

a tablespoonful, or more, by means of a 2 oz. India rubber enema bottle.

What Not to Do.

There are two preparations of mercury we wish to warn you against administering of your own accord, viz.: calomel, and a milder preparation called grey-powder (mercury with chalk). It is a common practice in some countries to give calomel, on account of the readiness with which it can be administered, it being small in quantity, and nearly tasteless. Grey-powder also, is, with many mothers, a favorite in the nursery. It is a medicine of immense power—either for good or for evil; in certain cases it is very valuable; but in others, and in the great majority, it is very detrimental. This practice, then, of a mother giving mercury, whether in the form either of calomel or grey-powder, cannot be too strongly condemned, as the frequent administration either of the one or the other weakens the body, predisposes it to cold, and frequently excites scrofula, a disease too common in this country. Calomel and grey-powder, then, ought never to be administered unless ordered by a medical man.

Syrup of buckthorn and jalap are also frequently given, but they are griping medicines for

a baby, and ought to be banished from the nursery.

The frequent repetition of opening medicines, then, in any shape or form, very much interferes with digestion; they must, therefore, be given as seldom as possible.

Let us, at the risk of wearying you, again urge the importance of your avoiding, as much as possible, giving a babe purgative medicines. They irritate beyond measure the tender bowels of an infant, and only make him more costive afterwards; they interfere with his digestion, and are liable to give him cold. A mother who is always, of her own accord, quacking her child with opening physic, is laying up a store of trouble for the future.

Means of Preventing the Costiveness of an Infant.

Great care should be paid to the rules of health, such as attention to diet, exercise in the open air, thorough ablution of the whole body—more especially when he is being washed—causing the water, from a large and well-filled sponge, to stream over the lower part of his bowels; the regular habit of causing him, at stated periods, to be held out, whether he wants to or not, that he may solicit a stool. If all these rules were ob-

served, costiveness would not so frequently prevail, and one of the miseries of the nursery would be done away with.

Some mothers are frequently dosing their poor unfortunate babes either with magnesia to cool them, or with castor oil to heal their bowels. Oh, the folly of such practices! The frequent repetition of magnesia, instead of cooling an infant, makes him feverish and irritable. The constant administration of castor oil, instead of healing the bowels, wounds them beyond measure. No—it would be a blessed thing if a babe could be brought up without giving him a particle of opening medicine; his bowels would then act naturally and well. But then, as we have just now remarked, a mother must be particular in attending to nature's medicines—to fresh air, to exercise, to diet, to thorough ablution, etc. Until that time comes, poor unfortunate babies will be occasionally dosed with an aperient.

What Are the Causes of, and Remedies for, Flatulence.

Flatulence most frequently occurs in those infants who live on artificial food, especially if they be over-fed. We therefore beg to refer you to the precautions we have given, when speaking of the importance of keeping a child for the first

five or six months *entirely* to the breast; and, if that be not practicable, of the times of feeding, and of the *best* kinds of artificial food, and of those which are least likely to cause "wind."

What to Do.

Notwithstanding these precautions, if the babe should still suffer, "one of the best and safest remedies for flatulence is aromatic spts. of ammonia —a teaspoonful of a solution of one drachm to an ounce and a-half of water." Or, a little dill or anise-seed may be added to the food, or half a teaspoonful of dill water. Or, take twelve drops of oil of dill and two lumps of sugar; rub them well in a mortar together; then add, drop by drop, three tablespoonfuls of spring water; let it be preserved in a bottle for use. A teaspoonful of this, first shaking the vial, may be added to each quantity of food. Or, three teaspoonfuls of bruised caraway seeds may be boiled for ten minutes in a teacupful of water, and then strained. One or two teaspoonfuls of the caraway-tea may be added to each quantity of his food, or a dose of rhubarb and magnesia may occasionally be given.

Opodeldoc, or warm olive oil, well rubbed for a quarter of an hour at a time, by means of the warm hand, over the bowels, will frequently

give relief. Turning the child over on his bowels, so that they may press on the nurse's lap, will often afford great comfort. A warm bath (where he is suffering severely) generally gives immediate ease in flatulence: it acts as a fomentation to the bowels. After all, a dose of mild aperient medicine, when the babe is suffering severely, is often the best remedy for "wind."

Remember, at all times, prevention, whenever it be—and how frequently it is—possible, is better than cure.

What Not to Do.

Patent "cordials," "preservatives," and the like, are sometimes given in flatulence; but as most of these quack medicines contain, in one form or another, either opium or poppy, and as opium and poppy are both dangerous remedies for children, ALL quack medicines must be banished the nursery.

Syrup of poppies is another remedy which is often given by a mother or a nurse to afford relief for flatulence; but let us urge upon you the importance of banishing it from the nursery. It has (when given by unprofessional persons) caused the untimely end of thousands of children. The medical journals and the newspapers

teem with cases of deaths resulting from injudicious administering of opiates to ease pain and to induce sleep.

Symptoms, Causes and Treatment of "Gripings" of an Infant.

The child draws up his legs; screams violently; if put to the nipple to comfort him, he turns away from it and cries bitterly; he strains, as though he were having a stool; if he have a motion, it will be slimy, curdled, and perhaps green. If, in addition to the above symptoms, he passes a large quantity of watery fluid from his bowels, the case becomes one of "watery gripes," and requires the immediate attention of a doctor.

The causes of "gripings" or "gripes" may proceed either from the infant or from the mother. If from the child, it is generally owing either to improper food or to over-feeding; if from the mother, it may be traced to her having taken either greens, or pork, or pickles, or powerful purgatives.

What to Do.

The treatment, of course, must depend upon the cause. If it arise from over-feeding we would advise a dose of castor oil to be given and

warm fomentations to be applied to the bowels, and the mother, or the nurse, to be more careful for the future. If it proceed from improper food, a dose or two of magnesia and rhubarb in a little dill water. If it arise from a mother's imprudence in eating, or from her taking violent medicine, a warm bath. A warm bath, indeed, let the cause of "griping" be what it may, usually affords instant relief.

Another excellent remedy is the following: Soak a piece of new flannel, folded into two or three thicknesses, in warm water; wring it tolerably dry and apply as hot as the child can comfortably bear it, to the bowels; then wrap him in a warm, dry blanket, and keep him, for at least half an hour, enveloped in it. Under the above treatment, he will generally soon fall into a sweet sleep, and awake quite refreshed.

What Not to Do.

Do not give opiates, astringents, chalk, or any quack medicine whatever.

If a child suffer from a mother's folly in her eating food which proves to have been unsuitable, that one experience should be heeded. It would be cruel in the extreme for him a second time to be tormented from the same cause.

Hiccough and its Treatment.

Hiccough is of such a trifling nature as hardly to require interference. It may generally be traced to over-feeding. Should it be severe, four or five grains of calcined magnesia, with a little syrup and anise-seed water, and attention to feeding, are all that will be necessary.

Symptoms of Infantile Diarrhœa.

Infantile diarrhœa, or cholera infantum, is one of the most frequent and serious of infantile diseases, and carries off, during the year, more children than any other complaint whatever; a knowledge of the symptoms, therefore, is quite necessary for a mother to know in order that she may, at the proper time, call in efficient medical aid.

It will be well, before describing the symptoms, to tell you how many motions a young infant ought to have a day, their color, consistence and smell. He should have from three to six motions during the twenty-four hours, and the color ought to be a bright yellow, inclining to orange; the consistence should be that of thick gruel; indeed, his motion, if healthy, ought to be somewhat of the color (but a little more orange-tinted) and of the consistence of

mustard made for the table; it should be nearly if not quite, devoid of smell; it ought to have a faint and peculiar, but not a strong and disagreeable odor. If it have a strong and disagreeable smell, the child is not well and the base should be investigated, more especially if there be either curds or lumps in the motions; these latter symptoms denote that the food has not been properly digested.

Now, suppose a child should have a slight bowel complaint—that is to say, that he has six or eight motions during the twenty-four hours, and that the stools are of a thinner consistence than what we have described—provided, at the same time, that he be not griped, that he have no pain, and have not lost his desire for the breast—what ought to be done? *Nothing.* A slight looseness of the bowels should never be interfered with; it is often an effort of nature to relieve itself of some vitiated motion that wanted a vent—or to act as a diversion, by relieving the irritation of the gums. Even if he is not cutting his teeth, he may be "breeding" them—that is to say, the teeth may be forming in his gums, and may cause almost as much irritation as though he were actually cutting them. Hence, you see the immense good a slight "looseness of the bowels"

may cause. We think that we have now proved to you the danger of interfering in such a case, and that we have shown you the folly and the mischief of at once giving astringents—such as patent "cordials," etc., to relieve a slight relaxation.

A moderate "looseness of the bowels," then, is often a safety-valve, and you may, with as much propriety, close the safety-valve of a steam engine as stop a moderate "looseness of the bowels!"

Now, if the infant, instead of having from three to six motions, should have more than double the latter number; if they be more watery; if they become slimy and green, or green in part and curdled; if they should have an unpleasant smell; if he be sick, cross, restless, fidgety, and poorly; if every time he have a motion he is griped and in pain—we should then say that he is laboring under diarrhæa; then it will be necessary to give a little medicine, which we will indicate subsequently.

Should there be both blood and slime mixed with the stool, the case becomes more serious; still, with proper care, relief can generally be quickly obtained. If the evacuations—instead of being stool—are merely blood and slime, and the

child strain frequently and violently, endeavoring thus, but in vain, to relieve himself, crying at each effort, the case assumes the character of dysentery.

If there be a mixture of blood, slime and stool from the bowels, the case would be called dysenteric-diarrhœa. The latter case requires great skill and judgment on the part of a medical man, and great attention and implicit obedience from the mother and the nurse. We merely mention these diseases in order to warn you of their importance, and of the necessity of strictly attending to a doctor's orders.

Causes of Diarrhœa—"Looseness of the Bowels."

Improper food; overfeeding; teething; cold; the mother's milk, from various causes, disagreeing, namely, from her being out of health, from her eating unsuitable food, from her taking improper and drastic purgatives, or from her suckling her child when she is pregnant. Of course, if any of these causes are in operation, they ought, if possible, to be remedied, or medicine to the babe will be of little avail.

What to Do.

If the case be *slight*, and has lasted two or three days, do not interfere by giving medicine

at first, and if the cause, as it probably is, be some acidity or vitiated stool that wants a vent, and thus endeavors to obtain one by purging, the best treatment is castor oil, or a moderate one of rhubarb and magnesia, and thus to work off the enemy. After the enemy has been worked off, either by the castor oil or by the magnesia and the rhubarb, the purging will, in all probability, cease; but if the relaxation still continue, that is to say, for three or four days—then, if medical advice cannot be procured, the following mixture should be given:

Take of aromatic powder of chalk and opium, ten grains; oil of dill, five drops; simple syrup, three drachms; water, nine drachms.

Half a teaspoonful to be given to an infant of six months and under, and one teaspoonful to a child above that age, every four hours, first shaking the bottle.

If the babe be at the breast, he ought, for a few days, to be kept *entirely* to it. The mother should be most particular in her own diet.

What Not to Do.

The mother must neither take greens nor cabbage, nor raw fruit, nor pastry; indeed, while the diarrhœa of her babe continues, she had better

abstain from wine, as well as from fermented liquors. The child, if at the breast, ought *not*, while the diarrhœa continues, to have any artificial food. He must neither be dosed with grey powder (a favorite, but highly improper remedy, in these cases), nor with any quack medicines.

Symptoms of Dysentery.

Dysentery frequently arises from a neglected diarrhœa. It is more dangerous than diarrhœa, as it is of an inflammatory character; and as, unfortunately, it frequently attacks a delicate child, requires skillful handling; hence great care and experience is required in treating a case of dysentery.

The infant, in all probability, has had an attack of diarrhœa — bowel complaint, as it is called—for several days; he having had a dozen or two of motions, many of them slimy and frothy, like "frog-spawn," during the twenty-four hours. Suddenly, the character of the motion changes—from being principally stool, it becomes almost entirely blood and mucus; he is dreadfully griped, which causes him to strain violently, as though his inside would come away every time he has a motion—screaming and twisting about, evidently being in the greatest pain, drawing his legs up to his belly and writhing in

agony. Sickness and vomiting are always present, which still more robs him of his little remaining strength, and prevents the repair of his system. Now, look at his face! It is the very picture of distress. Suppose he has been a plump, healthy little fellow, you will see his face in a few days become old-looking, care-worn, haggard and pinched. Day and night the enemy tracks him (unless proper remedies be administered); no sleep, or if he sleep, he is, every few minutes, roused. It is heart-rending to have to attend a bad case of dysentery in a child—the writhing, the screaming, the frequent vomiting, the pitiful look, the rapid wasting and exhaustion, make it more distressing to witness than almost any other disease a doctor attends.

A judicious physician will do a great deal, and should be summoned at once. In case you are not able to procure one, we will tell you what to do and what not to do.

What to Do.

If the child be at the breast, keep him to it, and let him have nothing else; for dysentery is frequently caused by improper feeding. If your milk be not good, or it be scanty, instantly procure a healthy wet-nurse. *Lose not a moment*; for in dysentery, moments are precious. But,

suppose that you have no milk, and that no wet-nurse can be procured: what then? Feed him entirely on cow's milk—the milk of *one* healthy cow; let the milk be unboiled, and be fresh from the cow. Give it in small quantities at a time, and frequently, so that it may be retained on the stomach. If a tablespoonful of the milk make him sick, give him a dessertspoonful; if a dessertspoonful cause sickness, let him have a teaspoonful at a time, and let it be repeated every quarter of an hour. But, remember, in such a case the breast milk—the breast milk alone—is incomparably superior to any other milk or to any other food whatever.

If he be a year old, and weaned, then feed him, as above recommended, on the cow's milk. If there is extreme exhaustion and debility, add fifteen drops of brandy to each tablespoonful of new milk, and let it be given every half hour.

Now with regard to medicine. We approach this part of the treatment with some degree of reluctance—for dysentery is a case requiring opium, and opium we never like a mother, of her own accord, to administer. But, suppose a physician cannot be procured in time, the mother must then prescribe, or the child will die! What, then, is to be done?

The following is a preparation which we first administer in every stage of dysentery: Take best Turkish rhubarb root, bruised; saleratus or bicarbonate of potash, pulverized; peppermint plant, pulverized; cinnamon, pulverized; of each two scruples, or one small teaspoonful. Mix; rub in a mortar. Then add half a pint of boiling water, strain and add to it sufficient loaf sugar to sweeten; add, when cold, if there is no fever, two tablespoonsfuls of French brandy. Of this preparation give a tablespoonful every hour, until the passages are changed in their appearance and consistence.

It should be repeated according to the urgency of symptoms, duration of disease, and other circumstances; but generally after it has acted upon the bowels a tablespoonful given three or four times a day is sufficient.

Now, suppose the dysentery has for several days persisted, and that during that time nothing but mucus and blood—that no real stool—has come from the bowels, then a combination of castor oil and opium* ought (instead of the

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* NOTE:—The late Dr. Baly, who had made dysentery his particular study, considered the combination of opium and castor oil very valuable in dysentery.

medicine recommended above) to be given: Take of mucilage of gum acacia, three drachms; simple syrup, three drachms; tincture of opium, ten drops (*not* minims); castor oil, two drachms; cinnamon water, four drachms. A teaspoonful to be taken every four hours, first shaking the bottle well.

A warm bath, at the commencement of the disease, is very efficacious; but it must be given at the *commencement*. If he has had dysentery for a day or two, he will be too weak to have a warm bath; then, instead of the bath, try the following:—Wrap him in a blanket, which has been previously wrung out of hot water; over which envelope him in a dry blanket. Keep him in this hot, damp blanket for half an hour; then take him out, put on his night-gown and place him in bed—which must be, if it is winter time, previously warmed. The above "blanket treatment" will frequently give great relief, and will sometimes cause him to fall into a sweet sleep. A flannel bag, filled with hot powdered table salt, made hot in the oven, applied to the bowels, will afford much comfort.

What Not to Do.

Do not give aperients, unless it be, as before advised, the castor oil guarded with the opium;

do not stuff him with artificial food; do not fail to send for a judicious and an experienced physician; for, remember, it requires a skillful doctor to treat a case of dysentery, more especially in a child.

Nettle-Rash.

Nettle-rash consists of several irregular, raised wheals, red at the base, and white on the summit on different parts of the body; but it seldom attacks the face. It is not contagious, and it may occur at all ages and many times. It comes and goes, remaining only a short time in a place. It puts on very much the appearance of the child having being stung by nettles—hence its name. It produces a great heat, itching, and irritation, sometimes to such a degree as to make him feverish, sick, and fretful. He is generally worse when he is warm in bed, or when the surface of his body is suddenly exposed to the air. Rubbing the skin, too, always aggravates the itching and the tingling, and brings out a fresh crop.

The *cause* of the nettle-rash may commonly be traced to improper feeding; although, occasionally, it proceeds from teething.

What to Do.

It is a complaint of no danger, and readily gives way to a mild aperient, and to attention

to diet. There is nothing better to relieve the irritation of the skin than a warm bath.

What Not to Do.

Do not apply cold applications to his skin, and do not wash (while the rash is out) in quite *cold* water. Do not allow him to be in a draught, but let him be in a well-ventilated room. If he be old enough to eat meat, keep it from him for a few days, and let him live on milk and farinaceous diet. Avoid strong purgatives.

Symptoms and the Treatment of Red-Gum.

Red-gum, tooth-rash, red-gown, is usually owing to irritation from teething; not always from the cutting, but from evolution—the "breeding," of the teeth. It is also sometimes owing to unhealthy stools irritating the bowels, and showing itself, by sympathy, on the skin. Red-gum consists of several small papulæ, or pimples, about the size of pin heads, and may be known from measles—the only disease for which it is at all likely to be mistaken—by its being unattended by symptoms of cold, such as sneezing, running, and redness of the eyes, etc., and by the patches *not* assuming a cresentic—half-moon shape; red-gum, in short, may readily be known by the child's health being unaffected, unless, indeed,

there be a great crop of pimples; then there will be slight feverishness.

What to Do.

Little need be done. If there be a good deal of irritation, a mild aperient should be given. The child ought to be kept moderately, but not very warm.

What Not to Do.

Draughts of air, or cold, should be carefully avoided, as, by sending the eruption suddenly in, either convulsions or disordered bowels might be produced. Do not dose him.

"Stuffing of the Nose" in a New-Born Babe.

Rubbing a little tallow or goose-grease on the bridge of the nose is the old-fashioned remedy, and answers the purpose. It ought to be applied every evening just before putting him to bed. If the "stuffing" be severe, dip a sponge in hot water, as hot as he can comfortably bear; ascertain that it be not too hot, by previously applying it to your own face, and then put it on for a few minutes to the bridge of his nose. As soon as the hard mucus is within reach, it should be carefully removed.

Sickness in an Infant.

Many thriving babes are, after taking the breast, frequently sick; still we cannot look upon sickness otherwise than an index of either a disordered or of an overloaded stomach. If the child be sick, and yet be thriving, it is a proof that he overloads his stomach. A mother, then, must not allow him to suck so much at a time. She should, until he retain all he takes, lessen the quantity of milk. If he be sick and does *not* thrive, the mother should notice if the milk he throws up has a sour smell; if it have, she must first of all look to her own health; she ought to ascertain if her own stomach be out of order; for if such be the case, it is impossible for her to make good milk. She should observe whether in the morning her own tongue be furred and dry; whether she have a disagreeable taste in her mouth, or pains at her stomach, or heart-burn, or flatulence. If she have all, or any of these symptoms, the mystery is explained why he is sick and does not thrive. She ought then to seek advice, and a physician will soon put her stomach in good order; and, by so doing, will, at the same time, benefit her child.

But if the mother be in the enjoyment of good health, she must then look to the babe herself,

and ascertain if he be cutting his teeth; if the gums require lancing; if the secretions from the bowels be proper both in quantity and in quality; and, if he has had artificial food—it being absolutely necessary to give such food—whether it agree with him.

What to Do.

In the first place, if the gums are red, hot, and swollen, let them be lanced; in the second, if the secretions from the bowels be either unhealthy or scanty, give him a dose of aperient medicine, such as castor oil, or the following:—Take two or three grains of powdered Turkey rhubarb, three grains of pure carbonate of magnesia, and one grain of aromatic powder—mix. The powder to be taken at bedtime, mixed in a teaspoonful of sugar and water, and which should, if necessary, be repeated the following night. In the third place, if the food he is taking does not agree with him, change it. Give it in smaller quantities at a time, and not so frequently; or what will be better still, keep him, if it is possible, for a while, entirely to the breast.

What Not to Do.

Do not let him overload his stomach either with breast-milk, or with artificial food. Let the mother avoid, until this sickness be relieved,

greens, cabbage, and all other green vegetables.

Thrush.

The thrush is a frequent disease of an infant, and is often brought on either by stuffing or giving him improper food. A child brought up *entirely*, for the first three or four months, on the breast, seldom suffers from this complaint. The thrush consists of several irregular, roundish, white specks on the lips, the tongue, the inside, and the angles of the mouth, giving the parts affected the appearance of curds and whey having been smeared upon them. The mouth is hot and painful, and he is afraid to suck: the moment the nipple is put to his mouth he begins to cry. The thrush, sometimes, although but rarely, runs through the whole of the alimentary canal. It should be borne in mind, that nearly every child, who is suckling, has his or her tongue white or "frosted," as it is sometimes called. The thrush may be mild or very severe.

What to Do.

As the thrush is generally owing to improper and to artificial feeding, if the child be at the breast, keep him, for a time, entirely to it. Do not let him be always suckling, as that will not only fret his mouth, but will likewise irritate and make sore the mother's nipple.

If he be not at the breast, but has been weaned, then keep him for a few days entirely to a milk diet—to the milk of ONE cow—either boiled, if it be hot weather, to keep it sweet; or unboiled, in cool weather—fresh as it comes from the cow, mixed with warm water.

The best medicine is the old-fashioned one of borax, a combination of powdered lump-sugar and borax being a good one for the purpose; the powdered lump-sugar increases the efficacy, and the cleansing properties of the borax; it tends, moreover, to make it more palatable:—Take of borax, half a drachm; lump-sugar, two scruples; to be well mixed together, and made into twelve powders. One of the powders to be put dry on the tongue every four hours.

The best *local* remedy is honey of borax, which ought to be smeared frequently, by means of the finger, on the parts affected.

Thorough ventilation of the apartment must be observed; and great cleanliness of the vessels containing the milk should be insisted upon.

In a bad case of thrush, change of air to the country is most desirable; the effect is sometimes, in many cases, truly magical.

If the thrush be brought on either by too much or by improper food; in the first case, of

course, a mother must lessen the quantity; and in the second, she should be more careful in her selection.

What Not to Do.

Do not mind the trouble of ascertaining that the cooking-vessels connected with the baby's food are perfectly clean and sweet. Do not leave the purity and the goodness of the cow's milk (it being absolutely necessary to feed him on artificial food) to be judged either by the milkman, or by the nurse, but taste and prove it yourself. Do not keep the milk in a warm place, but either in the dairy or in the cellar; and, if it be summer time, let the jug holding the milk be put in a crock containing lumps of ice. Do not use milk that has been milked longer than twelve hours, but, if practicable, have it milked direct from the cow, and use it immediately—let it be really and truly fresh and genuine milk.

When the disease is severe, it may require more active treatment, therefore, the mother had better seek medical advice.

In a severe case of thrush, where the complaint has been brought on by artificial feeding—the babe not having the advantage of the mother's milk—it is really surprising how rapidly a wet

nurse—if the case has not been too long deferred—will effect a cure, where all other means have been tried and have failed. The effect has been truly magical. In a severe case of thrush pure air and thorough ventilation are essential to recovery.

The Cry of an Infant.

A babe can only express his wants and his necessities by a cry; he can only tell his aches and his pains by a cry; it is the only language of babyhood; it is the most ancient of all languages; it is the language known by our earliest progenitors; it is, if listened to aright, a very expressive language, although it is only but the language of a cry—

"Soft infancy, that nothing canst but cry."—*Shakespeare.*

There is, then, a language in the cry of an infant, which to a mother is the most interesting of all languages, and which a thoughtful physician can well interpret. The cry of a child, to an experienced doctor, is, each, and all, a distinct sound, and is as expressive as the notes of the gamut. The cry of passion, for instance, is a furious cry; the cry of sleepiness is a drowsy cry; the cry of grief is a sobbing cry; the cry of an infant when roused from sleep is

a shrill cry; the cry of hunger is very characteristic—it is unaccompanied with tears, and is a wailing cry; the cry of teething is a fretful cry; the cry of pain tells to the practised ear the part of pain; the cry of ear-ache is short, sharp, piercing, and decisive, the head being moved about from side to side, and the little hand being often put up to the affected side of the head; the cry of bowel-ache is also expressive—the cry is not so piercing as from ear-ache, and is an interrupted, straining cry, accompanied with a drawing-up of the legs to the belly; the cry of bronchitis is a gruff and phlegmatic cry; the cry of inflammation of the lungs is more a moan than a cry; the cry of croup is hoarse, and rough, and ringing, and is so characteristic that it may truly be called "the croupy cry;" the cry of inflammation of the membranes of the brain is a piercing shriek—a danger signal—most painful to hear.

The cry of a child recovering from a severe illness is a cross, and wayward and tearful cry; he may truly be said to be in a quarrelsome mood; he bursts out, without rhyme or reason, into a passionate flood of tears—into "a tempest of tears."

Tears are always, in a severe illness, to be looked

upon as a good omen, a sign of amendment, as—

"The tears that heal and bless."—*Bonar.*

Tears, when a child is dangerously ill, are rarely, if ever, seen; a cry, at night, for light—a frequent cause of a babe crying—is a restless cry:

"An infant crying in the night;
An infant crying for the light;
And with no language but a cry."—*Tennyson.*

Veal or Mutton Broth to Strengthen a Delicate Child.

Broths seldom agree with a babe at the breast. We have known them to produce sickness, disorder the bowels, and create fever.

Although broth and beef-tea, when taken by the mouth, will seldom agree with an infant at the breast, yet, when used as an enema, and in small quantities, so that they may be retained, we have frequently found them to be of great benefit; they have, in some instances, appeared to have snatched delicate children from the brink of the grave.

Weak Ankles.

If his ankles are weak, let them every morning be bathed, after the completion of his morning's ablution, for five minutes each time, with salt and water, a small handful of salt dissolved in

a quart of rain water (with the chill of the water off in the winter, and of its proper temperature in the summer time); then let them be dried: after the drying, let the ankles be well rubbed with the following liniment:

Oil of rosemary, three drachms; liniment of camphor, thirteen drachms. Do not let him be put on his feet early, but allow him to crawl and sprawl, and kick about the floor, until his body and his ankles become strong.

Do not, on any account, without having competent advice on the subject, use iron instruments, or mechanical supports of any kind; the ankles are generally, by such artificial supports, made worse, in consequence of the pressure causing a further dwindling away and enfeebling of the ligaments of the ankles, already wasted and weakened.

Let him wear shoes with straps over the insteps to keep them on.

Advice to Mother for the Benefit of Her Child.

She must endeavor to calm her feelings, or her milk will be disordered, and she will thus materially increase his illness. If he is laboring under any inflammatory disorder, she ought to

refrain from the taking of wine and spirits, and from all stimulating food; otherwise she will feed his disease.

Before concluding this subject, let us again urge upon you the importance—the paramount importance, if you wish your babe to be strong and hearty—of giving him as little opening physic as possible. The best physic for him is nature's physic: fresh air and exercise, and simplicity of living. A mother who is herself always drugging her child, can only do good to two persons: the doctor and the druggist.

If an infant from his birth be properly managed, if he have an abundance of fresh air for his lungs, if he have plenty of exercise for his muscles (by allowing him to kick and sprawl on the floor), if he have a good sousing of water for his skin, if during the early months of his life he have nothing but the mother's milk for his stomach—he will require very little medicine, the less the better. He does not want his stomach to be made into a doctor's shop! The grand thing is not to take every opportunity of administering physic, but of using every means of withholding it. And if physic be necessary, do not doctor him yourself, unless it be in extreme and urgent cases, but employ some experienced

physician. A babe who is always, without rhyme or reason, being physicked, is sure to be puny, delicate and unhealthy, and is ready at any moment to drop into an untimely grave!

We will maintain that a healthy child *never* requires drugging with opening physic, and that costiveness is brought on by bad management. Aperient medicines to a healthy child are so much poison! *Let us impress the above remarks on every mother's mind:* for it is a subject of vital importance. Never, then, give a purgative to a healthy child; for, if he be properly managed, he will never require one. If you once begin to give aperients, you will find a difficulty in discontinuing them. Therefore, when about to do so, we say with *Punch*—"Don't."

CHAPTER XXXVI.

CONCLUSION.

It has been our object in these pages to present the reader with a few practical facts in connection with the important subject of sick-nursing and care of infants, and to throw out such hints as appear likely to prove useful to those to whom the care of the sick may from time to time be entrusted. To diffuse as widely

as possible that knowledge which shall enable us to combat disease with greater intelligence, and with consequently greater chance of success, is surely a creditable work; and if this book should be the means of conveying to a mother or a sister the power by which she is enabled to render suffering more bearable, or facilitate nature in her cure of disease, by removing the many impediments which ignorance is constantly throwing in the way—its object will have been gained.

Without a knowledge of such matters sick-nursing can be but imperfectly done, and ignorance of the important part played by ventilation, cleanliness, regulation of temperature, and the like, in the treatment of disease, has more to do in determining the issue than might at first be supposed.

Of course, anything that has been said in these pages must not be thought for a moment to interfere with the work of a physician, nor, indeed, will it be found to do so; but the intelligent appreciation of those facts which underlie all true sick-nursing, will ever be found of infinite value in assisting him with his work. It has been said that a little knowledge is a dangerous thing, but it is only so in its misuse; the knowledge itself must always be beneficial, and is

better than none at all. To know something of the laws which govern health, is frequently to enable us to ward off disease; and in like manner to know something of the principles of sick-nursing, is to make the period of suffering shorter, and recovery more certain and complete.

In reference to the subject of Infancy, we beg to remark: there are four things essentially necessary to a babe's well-doing, namely: (1) plenty of water for his skin; (2) plenty of fresh genuine milk mixed with water for his stomach (of course, giving him ONLY his mother's milk during the first six, eight, or nine months of his existence); (3) plenty of pure air for his lungs; (4) plenty of sleep for his brain. These are the four grand essentials for an infant; without an abundance of one and all of them, perfect health is utterly impossible. Perfect health! the greatest earthly blessing, and more to be coveted than aught else beside! There is not a more charming sight in the universe than the beaming face of a perfectly healthy babe—

"His are the joys of nature, his the smile,
The cherub smile, of innocence and health."—*Knox.*

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TESTIMONIALS.

I. A. THAYER, M.D., Worcester, Mass.

It is known to physicians, that with many patients, especially children, the one thing which will determine whether they are to live or die, is the *Nursing*. Indeed, proper nursing would save a great majority of cases without medicine, and in cases depending on medicine for recovery, good nursing facilitates recovery, and is the source of immeasurable comfort to the patient. There is no one who, at some time, does not find it necessary to care for a friend in the misfortune of sickness, and hence every one should inform himself on the best way of rendering this highly important and humane service.

Mrs. Hayes' book "Home Nurse and Nursery" imparts this information in a clear, correct manner, and is one of those invaluable works that contribute to the sum of human happiness and ought to be in every family. I cheerfully say this and wish to make it emphatic, especially in the interest of the little sufferers in our cradles.

J. W. COBLE, M. D., Tamaqua, Pa.

I have examined the book "Home Nurse and Nursery" and find therein very many valuable hints; it meets my cordial approval.

An abundance of common sense suggestions for heads of families, both young and old. It is full of wisdom and contains more sound practical sense and advice than any work of the kind I have ever read. I advise all to obtain a copy and read it carefully, I am sure they will gather from its contents much useful and practical information in regard to their duties and relations to the sick and also the measures necessary to retain good health.

After perusal every one will consider its cost a mere trifle. It is a work that should commend itself to every thoughtful person.

Dr. E. B. DANA, Metuchen, N. J.

I have carefully examined the copy of "The Home Nurse and Nursery" which you placed in my hands and I unhesitatingly commend it to all as an excellent work and one which I wish might be found in every household.

CYRUS EDSON, M.D., Chief Inspector Health Department, New York City.

The "Home Nurse and Nursery" has an assured success. The authoress has discovered a public want and filled it.

BENJ. AYRES, M. D., Brooklyn, N. Y.

An eminently useful work is the "Home Nurse and Nursery." Its careful study and an intelligent application of its teachings, will prevent many a pang of pain and mitigate much of the suffering the sick must endure, for the lack of just such knowledge as this admirable work contains. It will be a great help and reliable guide to any one called upon to care for infants or invalids.

P. M. DOWD, M. D., Oswego, N .Y.

I have examined "The Home Nurse and Nursery" with some care, and consider it an excellent work. I can heartily recommend it to every one.

WM. SPRAGUE, M.D., Brooklyn, N.Y.

I have carefully examined the "Home Nurse and Nursery" and consider it a book that should be in every home in this land. Truly does as much depend on good nursing as on the skill of the physician.

M. A. McCAY, M.D., Northumberland, Pa.

This is to certify, that having examined the work "The Home Nurse and Nursery," I hereby give it my unqualified approbation and endorsement as being a book which should be found in every mother's possession.

C. H. ANDRUS, M. D., Metuchen, N. J.

I have examined Mrs. Harriet E. Hayes' book upon Nursing. I am greatly pleased with it; and can truthfully say, that during a practice of over forty years I have met with no work of its kind that equals it in point of excellence, intelligence and common sense. I think it would be well if every family possessed a copy.

TESTIMONIALS.

ANDREW BURT, M.D., Tamaqua, Pa.

I have examined "The Home Nurse and Nursery" and, after looking carefully over the volume, I can heartily recommend it, especially to mothers. It is worth its weight in gold, and no one having children ought to ask, how they can afford to take it; but rather, how they can afford to be without it. It is worth more than double what it costs. I do not see how publishers can sell a work of so sterling qualities at such little cost.

I hope that every mother in Tamaqua will take a copy.

P. D. HARDING, M.D., Goshen, Ind.

"The Home Nurse and Nursery" is a book that should find its way into every family and be carefully perused. It will prove instructive and very useful.

F. B. NORTON, M. D., Metuchen, N. J.

"The Home Nurse and Nursery" is full of valuable suggestions, and a home is not complete without it.

A. C. HUNT, M. D., Metuchen, N. J.

"The Home Nurse and Nursery" is a book that contains much which is applicable to the care of the sick and will prove useful in the household.

E. N. MOSSER, M.D., Mechanicsb'g, Pa.

In this admirable work, "The Home Nurse and Nursery," is contained such knowledge for the proper care and management of the sick as every mother and nurse should possess. With inefficient nursing the best directed efforts of the most skilled physician may be thwarted. After a careful examination of the work, I have no hesitancy in recommending it to every household.

A. B. SECHRIST, Practising Physician, Mechanicsburg, Pa.

I have examined "The Home Nurse and Nursery," and can recommend it as a useful work and a reliable guide to all who are called upon to attend the sick.

E. H. BARBER, M.D., New Brunswick, N. J.

I have examined the book, "The Home Nurse and Nursery," by Mrs. Hayes, and think it a valuable book, well adapted to the needs of the sick room. Would recommend it as a book that will be useful in every case of sickness.

Dr. M. EVA PECK, Goshen, Ind.

I have carefully reviewed "The Home Nurse and Nursery." I can heartily recommend it as an eminently useful work, and an intelligent application of its teachings would soon breed a famine for the physicians.

GEO. B. SULLIVAN, M.D., Flemington, N. J.

"Home Nurse and Nursery" is an instructive and useful book, and one that should be found in every household.

KRIDER BROS., Physicians and Surgeons, Goshen, Ind.

We have carefully examined "The Home Nurse and Nursery" and take pleasure in recommending it as an excellent work for the mother.

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